



# The Village of Key Biscayne

## Master Plan Evaluation and Appraisal Report

*adopted July 2006*  
*revised July 2007*





Village of Key Biscayne

# **Master Plan Evaluation and Appraisal Report**

*adopted July 2006  
revised July 2007*



Prepared with the assistance of  
Wallace Roberts & Todd, LLC



VILLAGE OF KEY BISCAIYNE

**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAIYNE MASTER PLAN**

***Acknowledgements***

**Village of Key Biscayne Residents, Property Owners, and Business Owners**

**Vision Plan and Evaluation and Appraisal Report (EAR) Committee**

Edward Easton, *Chair*

Alan Fein, *Vice Chair*

Luis Arrondo  
Milt Berg  
Willie Borroto  
Martha Broucek  
Frank Caplan  
Bonnie Cooper  
Nancy Doke-Harrison  
Rachel Fried

Dr. Henny Groschel-Becker  
Matthias Kammerer  
Deborah de Leon  
Dr. Bob Maggs  
Dr. Jorge E. Mendiá  
Edward Meyer  
Ana Rasco  
Veronica Scharf-Garcia

**Village Council**

Robert Oldakowski, *Mayor*  
Robert L. Vernon, *Vice Mayor*

Enrique García, *Councilmember*  
Jorge E. Mendiá, *Councilmember*

Stephen Liedman, *Councilmember*  
Thomas Thornton, *Councilmember*

Patricia Weinman, *Councilmember*

**Village Staff**

Jacqueline R. Menendez, Village Manager  
Jud Kurlancheek, AICP, Director of Building, Zoning and Planning  
Stephen Helfman, Weiss, Serota, Helfman et. al., P.A.  
Conchita H. Alvarez, CMC, Village Clerk

**Consultants**

Wallace Roberts & Todd, LLC



# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAYNE MASTER PLAN

*Adopted July 2006, revised July 2007*

## TABLE OF CONTENTS

Letters of Transmittal .....	1
Village Council Adoption Resolution .....	9
Executive Summary .....	13
1. Introduction .....	18
a. <i>Master Plan and Initial EAR</i> .....	18
b. <i>Profile of the Community</i> .....	18
c. <i>Purpose of the EAR</i> . ....	20
d. <i>Summary of EAR Requirements and Process</i> .....	20
e. <i>Process for Public Involvement</i> .....	22
f. <i>Key Biscayne 2020 Vision</i> . ....	23
2. Community Wide Assessment.....	32
a. <i>Population Growth and Changes in Land Area</i> .....	32
b. <i>Ethnicity and Race Components</i> .....	33
c. <i>Population Projections</i> .....	34
d. <i>Extent of Vacant and Developable Land</i> . ....	36
e. <i>Location of Development in Relation to Master Plan</i> .....	38
f. <i>Infrastructure Levels of Service</i> .....	40
(1) Transportation .....	40
(2) Sanitary Sewer and Potable Water .....	42
(3) Solid Waste Management .....	46
g. <i>Coordination of Land Use and Public School Planning</i> . ....	47
h. <i>Coastal High-Hazard Area development mitigation strategies</i> . ....	49
3. Assessment of Master Plan Elements.....	50
a. <i>Future Land Use</i> .....	50
(1) Purpose of the Future Land Use Plan. ....	50
(2) Summary Assessment.....	50
(3) Recommended Amendments to the Future Land Use Element. ...	50
(4) Evaluation of Goals, Objectives, and Policies of the Traffic Circulation Plan. ....	52
(5) Future Land Use Plan Land Development Code Ordinances.....	52
b. <i>Traffic Circulation</i> .....	59
(1) Purpose of the Traffic Circulation Plan. ....	59
(2) Summary Assessment.....	59
(3) Recommended Amendments to the Traffic Circulation Element. ..	59
(4) Evaluation of Goals, Objectives, and Policies of the Traffic Circulation Plan. ....	61
(5) Traffic Circulation Plan Land Development Code Ordinances.....	61
c. <i>Housing</i> .....	63
(1) Purpose of the Housing Plan. ....	63



VILLAGE OF KEY BISCAINE

**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAINE MASTER PLAN**

(2) Summary Assessment.....	63
(3) Recommended Amendments to the Housing Element .....	63
(4) Evaluation of Goals, Objectives and Policies of the Housing Plan.....	65
(5) Housing Plan Land Development Code Ordinances.....	65
<b>d. Infrastructure.....</b>	<b>67</b>
(1) Purpose of the Infrastructure Plan.....	67
(2) Summary Assessment.....	67
(3) Recommended Amendments to the Infrastructure Element. ....	67
(4) Evaluation of Goals, Objectives, and Policies of the Infrastructure Plan. ....	68
(5) Infrastructure Plan Land Development Code Ordinances. ....	68
<b>e. Conservation and Coastal Management.....</b>	<b>71</b>
(1) Purpose of Conservation and Coastal Management Plan. ....	71
(2) Summary Assessment.....	71
(3) Recommended Amendments to the Conservation and Coastal Management Element. ....	71
(4) Evaluation of Goals, Objectives, and Policies of the Conservation and Coastal Management Plan. ....	72
(5) Conservation and Coastal Management Plan Land Development Code Ordinances.....	72
<b>f. Recreation and Open Space.....</b>	<b>79</b>
(1) Purpose of Recreation and Open Space Plan.....	79
(2) Summary Assessment.....	79
(3) Recommended Amendments to the Recreation and Open Space Element. ....	79
(4) Evaluation of Goals, Objectives, and Policies of the Recreation and Open Space Element. ....	81
(5) Recreation and Open Space Plan Land Development Code Ordinances. ....	81
<b>g. Intergovernmental Coordination.....</b>	<b>83</b>
(1) Purpose of Intergovernmental Coordination Plan.....	83
(2) Summary Assessment.....	83
(3) Recommended Amendments to the Intergovernmental Coordination Element.....	83
(4) Evaluation of Goals, Objectives, and Policies of the Intergovernmental Coordination Plan. ....	85
(5) Intergovernmental Coordination Plan Land Development Code Ordinances. ....	85
<b>h. Capital Improvements.....</b>	<b>87</b>
(1) Purpose of Capital Improvements Plan. ....	87
(2) Summary Assessment.....	87
(3) Recommended Amendments to the Capital Improvements Element.	



VILLAGE OF KEY BISCAYNE

**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAYNE MASTER PLAN**

(4)	Evaluation of Goals, Objectives, and Policies of the Capital Improvements.....	90
(5)	Capital Improvements Plan Land Development Code Ordinances.....	90
<b>4.</b>	<b>Major Local Issues .....</b>	<b>94</b>
<b>a.</b>	<b><i>Definition, Preservation and Enhancement of Key Biscayne's Unique Village Character and Quality of Life.....</i></b>	<b>96</b>
(1)	Assessment of success in implementing Master Plan objectives related to issue. ....	96
(2)	Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	97
(3)	Recommended Amendments to the Master Plan. ....	97
<b>b.</b>	<b><i>The Need for Additional Local Parks, Recreation Space and Open Space .....</i></b>	<b>98</b>
(1)	Assessment of success in implementing Master Plan objectives related to issue: .....	98
(2)	Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	103
(3)	Recommended Amendments to the Master Plan. ....	104
<b>c.</b>	<b><i>Calusa Park, Crandon Park, Bill Baggs Cape Florida State Park and Virginia Key - Interlocal Cooperation Relative to Village Issues..</i></b>	<b>106</b>
(1)	Assessment of success in implementing Master Plan objectives related to issue. ....	107
(2)	Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	108
(3)	Recommended Amendments to the Master Plan. ....	108
<b>d.</b>	<b><i>Traffic Volume, Operations and Safety .....</i></b>	<b>109</b>
(1)	Assessment of success in implementing Master Plan objectives related to issue. ....	109
(2)	Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	112
(3)	Recommended Amendments to the Master Plan. ....	113
<b>e.</b>	<b><i>Implications of Redevelopment .....</i></b>	<b>114</b>
(1)	Assessment of success in implementing Master Plan objectives related to issue. ....	114
(2)	Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	121
(3)	Recommended Amendments to the Master Plan. ....	121
<b>f.</b>	<b><i>Sustainability of Local Retail and Services .....</i></b>	<b>124</b>
(1)	Assessment of success in implementing Master Plan objectives related to issue. ....	124
(2)	Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	125
(3)	Recommended Amendments to the Master Plan. ....	125



VILLAGE OF KEY BISCAYNE

**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAYNE MASTER PLAN**

<b>g. Vulnerability to Damage from Tropical Storms and Hurricanes ..</b>	<b>125</b>
(1) Assessment of success in implementing Master Plan objectives related to issue. ....	126
(2) Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	128
(3) Recommended Amendments to the Master Plan. ....	128
<b>h. Need to Improve or Replace Infrastructure.....</b>	<b>129</b>
(1) Assessment of success in implementing Master Plan objectives related to issue. ....	129
(2) Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	133
(3) Recommended Amendments to the Master Plan. ....	133
<b>i. Implications of Debt Cap .....</b>	<b>134</b>
(1) Assessment of success in implementing Master Plan objectives related to issue. ....	134
(2) Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	135
(3) Recommended Amendments to the Master Plan. ....	135
<b>j. Conservation, Coastal Management and Environmental Protection     .....</b>	<b>135</b>
(1) Assessment of success in implementing Master Plan objectives related to issue. ....	135
(2) Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	137
(3) Recommended Amendments to the Master Plan. ....	137
<b>k. Land Development in the Context of Master Plan Goals, Objectives,     and Policies .....</b>	<b>138</b>
(1) Assessment of success in implementing Master Plan objectives related to issue. ....	138
(2) Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	139
(3) Recommended Amendments to the Master Plan. ....	139
<b>l. Historic, Cultural and Educational Resources and Needs .....</b>	<b>140</b>
(1) Assessment of success in implementing Master Plan objectives related to issue. ....	140
(2) Description of changed circumstances (if any) related to issue since Master Plan was prepared/updated.....	141
(3) Recommended Amendments to the Master Plan. ....	141
<b>5. Consistency with Florida Growth Management Laws .....</b>	<b>143</b>
<b>a. State Comprehensive Plan, Chapter 187, F.S.....</b>	<b>143</b>
(1) Manner of Compliance with State Comprehensive Plan Elements ..	143
(2) Recommended Amendments to Achieve Compliance with the State Comprehensive Plan Elements .....	150





VILLAGE OF KEY BISCAIYNE

**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAIYNE MASTER PLAN**

<b>b. Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163 (Part II), F.S.</b>	<b>151</b>
(1) Manner of Compliance with Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163 (Part II), F.S.	151
(2) Recommended Amendments to Achieve Compliance with the Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163 (Part II), F.S.	176
<b>c. Rule Chapter 9J-5, F.A.C.</b>	<b>177</b>
(1) Manner of Compliance with Chapter 9J-5, F.A.C.	177
(2) Recommended Amendments to Achieve Compliance with 9J-5 F.A.C.	202
<b>d. Strategic Regional Policy Plan for South Florida</b>	<b>204</b>
(1) Manner of Compliance with Strategic Regional Policy Plan for South Florida	204
(2) Recommended Amendments to Achieve Compliance with the Strategic Regional Policy Plan for South Florida	209
<b>6. Conclusions and Recommendations</b>	<b>211</b>
a. Recommended Amendments to the Future Land Use Element	211
b. Recommended Amendments to the Traffic Circulation Element	212
c. Recommended Amendments to the Housing Element	213
d. Recommended Amendments to the Infrastructure Element	214
e. Recommended Amendments to the Conservation and Coastal Management Element	215
f. Recommended Amendments to the Recreation and Open Space Element	216
g. Recommended Amendments to the Intergovernmental Coordination Element	217
h. Recommended Amendments to the Capital Improvements Element	218
<b>7. Appendices</b>	<b>220</b>
a. EAR Subcommittee Recommendations for Recreation and Open Space Concurrency Compliance	220





## VILLAGE OF KEY BISCAYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAYNE MASTER PLAN

## TABLES:

- Table 1:** Ethnicity Change in Key Biscayne and Miami-Dade County, 1990-2000
- Table 2:** Nativity and Place of Birth, 2000
- Table 3:** Annual Average Change, Population Projections for Key Biscayne and Miami Dade County, 1990 to 2025
- Table 4:** Population Projection Comparison Between Key Biscayne and Miami-Dade County
- Table 5:** Key Biscayne Residential Building Permits, April 2000 - April 2005
- Table 6:** Key Biscayne Commercial Building Permits, April 2000 – April 2005
- Table 7:** WASD Water System Capacity and Demand Comparison, 1995-2020
- Table 8:** Key Biscayne Parks and Recreation Level of Service
- Table 9:** Parks and Recreation Facilities Counted in 2005 Level of Service Calculations
- Table 10:** Median Household Income by Household Size in Miami-Dade County
- Table 11:** Affordable Housing Demand in Key Biscayne
- Table 12:** Projected Demand of Renter- and Owner-Occupied Units by Income based on AHNA Data
- Table 13:** Substandard Housing, 2000
- Table 14:** Sanitary Sewer and Water Conversion Project Progress

## FIGURES

**Figure 1:** Key Biscayne Future Land Use Map

**Figure 2:** Key Biscayne Zoning Map



# VILLAGE OF KEY BISCAIYNE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

## Letters of Transmittal

July 5, 2006

Theresa Manning  
Senior Planner  
South Florida Regional Planning Council  
3440 Hollywood Boulevard, Suite 140  
Hollywood, FL 33021

Re: Adopted Key Biscayne Evaluation and Appraisal Report

Dear Ms. Manning:

Enclosed is the adopted Village of Key Biscayne Evaluation and Appraisal Report. This package contains:

1 CD-Rom with the adopted EAR, advertisement for the adoption hearing, and minutes from the adoption hearing on CD-Rom

The public hearing for adoption was held on April 25, 2006. A copy of the adopted EAR is also being sent to:

Department of Community Affairs  
Florida Department Transportation District 6  
South Florida Water Management District  
Florida Department of Environmental Protection  
Florida Department of State, Historical Preservation  
Miami-Dade County  
City of Miami

These packages are being sent simultaneously with this transmittal to your agency. If you have questions regarding the EAR, please contact me, or our consultants Silvia Vargas or Lindsey Withrow:

**Jud Kurlanchek**  
Key Biscayne Dept. of Building, Planning, and Zoning  
88 West McIntyre Street  
Key Biscayne, FL 33149  
Tel: 305.365.8908; Fax: 305.365.5556  
[VKBBZP@aol.com](mailto:VKBBZP@aol.com)

**Lindsey Withrow and Silvia Vargas**  
Wallace Roberts Todd  
191 Giralda Avenue, Penthouse,  
Coral Gables FL, 33134  
Tel: 305.448.0788; Fax: 305.443.8431  
[lwithrow@cq.wrtddesign.com](mailto:lwithrow@cq.wrtddesign.com);  
[svargas@cq.wrtddesign.com](mailto:svargas@cq.wrtddesign.com)

The report has been posted for public review on the internet and at Key Biscayne Village Hall (88 West McIntyre Street, Key Biscayne, FL), Key Biscayne Public Library (299 Crandon Boulevard, Key Biscayne, FL), and the Key Biscayne Community Center (10 Village Way, Key Biscayne, FL) between 8:30 A.M.-12:00 PM and 1:00-4:30 P.M., weekdays.

Please notify us at your earliest convenience regarding the completeness of this package.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jud Kurlanchek for".

Jud Kurlanchek, Director of Building, Planning and Zoning



VILLAGE OF KEY BISCAIYNE  
**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAIYNE MASTER PLAN**

July 5, 2006

Ray Eubanks, AICP  
Plan Processing Team, Division of Community Planning  
Florida Department of Community Affairs  
2555 Shumard Oak Boulevard  
Tallahassee, FL 32399-2100

Re: Adopted Key Biscayne Evaluation and Appraisal Report

Dear Mr. Eubanks:

Enclosed is the adopted Village of Key Biscayne Evaluation and Appraisal Report. The package contains:

- 1 hard copy of the adopted EAR, advertisement for the adoption hearing, and minutes of from the adoption hearing
- 2 CD-Roms with the adopted EAR, advertisement for the adoption hearing, and minutes of from the adoption hearing

The public hearing for adoption was held on April 25, 2006. A copy of the adopted EAR is also being sent to:

South Florida Regional Planning Council  
Florida Department Transportation District 6  
South Florida Water Management District  
Florida Department of Environmental Protection  
Florida Department of State, Historical Preservation  
Miami-Dade County  
City of Miami

These packages are being sent simultaneously with this transmittal to your agency. If you have questions regarding the EAR, please contact me, or our consultants Silvia Vargas or Lindsey Withrow:

**Jud Kurlanchek**  
Key Biscayne Dept. of Building, Planning, and Zoning  
88 West McIntyre Street  
Key Biscayne, FL 33149  
Tel: 305.365.8908; Fax: 305.365.5556  
[VKBBZP@aol.com](mailto:VKBBZP@aol.com)

**Lindsey Withrow and Silvia Vargas**  
Wallace Roberts Todd  
191 Giralda Avenue, Penthouse,  
Coral Gables FL, 33134  
Tel: 305.448.0788; Fax: 305.443.8431  
[lwithrow@cq.wrtddesign.com](mailto:lwithrow@cq.wrtddesign.com);  
[svargas@cq.wrtddesign.com](mailto:svargas@cq.wrtddesign.com)

The report has been posted for public review on the internet and at Key Biscayne Village Hall (88 West McIntyre Street, Key Biscayne, FL), Key Biscayne Public Library (299 Crandon Boulevard, Key Biscayne, FL), and the Key Biscayne Community Center (10 Village Way, Key Biscayne, FL) between 8:30 A.M.-12:00 PM and 1:00-4:30 P.M., weekdays.

Please notify us at your earliest convenience regarding the completeness of this package.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jud Kurlanchek", is written over a light blue rectangular background.

Jud Kurlanchek, Director of Building, Planning and Zoning



# VILLAGE OF KEY BISCAINE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

July 5, 2006

Jim Quinn  
Environmental Manager  
Department of Environmental Protection  
Office of Intergovernmental Programs  
3900 Commonwealth Boulevard, Mail Station 47  
Tallahassee, FL 32399

Re: Adopted Key Biscayne Evaluation and Appraisal Report

Dear Mr. Quinn:

Enclosed is the adopted Village of Key Biscayne Evaluation and Appraisal Report. This package contains:

- 1 copy of the adopted EAR
- 1 copy of the advertisement for the adoption hearing
- 1 copy of the minutes of from the adoption hearing

The public hearing for adoption was held on April 25, 2006. A copy of the adopted EAR is also being sent to:

Department of Community Affairs  
South Florida Regional Planning Council  
Florida Department Transportation District 6  
South Florida Water Management District  
Florida Department of State, Historical Preservation  
Miami-Dade County  
City of Miami

These packages are being sent simultaneously with this transmittal to your agency. If you have questions regarding the EAR, please contact me, or our consultants Silvia Vargas or Lindsey Withrow:

**Jud Kurlanchek**  
Key Biscayne Dept. of Building, Planning, and Zoning  
88 West McIntyre Street  
Key Biscayne, FL 33149  
Tel: 305.365.8908; Fax: 305.365.5556  
[VKBBZP@aol.com](mailto:VKBBZP@aol.com)

**Lindsey Withrow and Silvia Vargas**  
Wallace Roberts Todd  
191 Giralda Avenue, Penthouse,  
Coral Gables FL, 33134  
Tel: 305.448.0788; Fax: 305.443.8431  
[lwithrow@cg.wrtddesign.com](mailto:lwithrow@cg.wrtddesign.com);  
[svargas@cg.wrtddesign.com](mailto:svargas@cg.wrtddesign.com)

The report has been posted for public review on the internet and at Key Biscayne Village Hall (88 West McIntyre Street, Key Biscayne, FL), Key Biscayne Public Library (299 Crandon Boulevard, Key Biscayne, FL), and the Key Biscayne Community Center (10 Village Way, Key Biscayne, FL) between 8:30 A.M.-12:00 PM and 1:00-4:30 P.M., weekdays.

Please notify us at your earliest convenience regarding the completeness of this package.

Sincerely,

A handwritten signature in blue ink, which appears to read "Jud Kurlanchek for".

Jud Kurlanchek, Director of Building, Planning and Zoning



VILLAGE OF KEY BISCAIYNE  
**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAIYNE MASTER PLAN**

July 5, 2006

Susan Harp  
Historic Preservation Planner  
Department of State  
Bureau of Historic Preservation  
500 South Bronough Street  
Tallahassee, FL 32399-0250

Re: Adopted Key Biscayne Evaluation and Appraisal Report

Dear Ms. Harp:

Enclosed is the adopted Village of Key Biscayne Evaluation and Appraisal Report. This package contains:

- 1 copy of the adopted EAR
- 1 copy of the advertisement for the adoption hearing
- 1 copy of the minutes of from the adoption hearing

The public hearing for adoption was held on April 25, 2006. A copy of the adopted EAR is also being sent to:

Department of Community Affairs  
South Florida Regional Planning Council  
Florida Department Transportation District 6  
South Florida Water Management District  
Florida Department of Environmental Protection  
Miami-Dade County  
City of Miami

These packages are being sent simultaneously with this transmittal to your agency. If you have questions regarding the EAR, please contact me, or our consultants Silvia Vargas or Lindsey Withrow:

**Jud Kurlanchek**  
Key Biscayne Dept. of Building, Planning, and Zoning  
88 West McIntyre Street  
Key Biscayne, FL 33149  
Tel: 305.365.8908; Fax: 305.365.5556  
[VKBBZP@aol.com](mailto:VKBBZP@aol.com)

**Lindsey Withrow and Silvia Vargas**  
Wallace Roberts Todd  
191 Giralda Avenue, Penthouse,  
Coral Gables FL, 33134  
Tel: 305.448.0788; Fax: 305.443.8431  
[lwithrow@cg.wrtddesign.com](mailto:lwithrow@cg.wrtddesign.com);  
[svargas@cg.wrtddesign.com](mailto:svargas@cg.wrtddesign.com)

The report has been posted for public review on the internet and at Key Biscayne Village Hall (88 West McIntyre Street, Key Biscayne, FL), Key Biscayne Public Library (299 Crandon Boulevard, Key Biscayne, FL), and the Key Biscayne Community Center (10 Village Way, Key Biscayne, FL) between 8:30 A.M.-12:00 PM and 1:00-4:30 P.M., weekdays.

Please notify us at your earliest convenience regarding the completeness of this package.

Sincerely,

A handwritten signature in blue ink, which appears to read "Jud Kurlanchek for".

Jud Kurlanchek, Director of Building, Planning and Zoning



VILLAGE OF KEY BISCAYNE  
**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAYNE MASTER PLAN**

July 5, 2006

Karen McGuire  
Planning  
FDOT, District Six  
1000 NW 111<sup>th</sup> Avenue  
Miami, FL 33172

Re: Adopted Key Biscayne Evaluation and Appraisal Report

Dear Ms. McGuire:

Enclosed is the adopted Village of Key Biscayne Evaluation and Appraisal Report. This package contains:

- 1 copy of the adopted EAR
- 1 copy of the advertisement for the adoption hearing
- 1 copy of the minutes of from the adoption hearing

The public hearing for adoption was held on April 25, 2006. A copy of the adopted EAR is also being sent to:

Department of Community Affairs  
South Florida Regional Planning Council  
South Florida Water Management District  
Florida Department of Environmental Protection  
Florida Department of State, Historical Preservation  
Miami-Dade County  
City of Miami

These packages are being sent simultaneously with this transmittal to your agency. If you have questions regarding the EAR, please contact me, or our consultants Silvia Vargas or Lindsey Withrow:

**Jud Kurlanchek**  
Key Biscayne Dept. of Building, Planning, and Zoning  
88 West McIntyre Street  
Key Biscayne, FL 33149  
Tel: 305.365.8908; Fax: 305.365.5556  
[VKBBZP@aol.com](mailto:VKBBZP@aol.com)

**Lindsey Withrow and Silvia Vargas**  
Wallace Roberts Todd  
191 Giralda Avenue, Penthouse,  
Coral Gables FL, 33134  
Tel: 305.448.0788; Fax: 305.443.8431  
[lwithrow@cq.wrtddesign.com](mailto:lwithrow@cq.wrtddesign.com);  
[svargas@cq.wrtddesign.com](mailto:svargas@cq.wrtddesign.com)

The report has been posted for public review on the internet and at Key Biscayne Village Hall (88 West McIntyre Street, Key Biscayne, FL), Key Biscayne Public Library (299 Crandon Boulevard, Key Biscayne, FL), and the Key Biscayne Community Center (10 Village Way, Key Biscayne, FL) between 8:30 A.M.-12:00 PM and 1:00-4:30 P.M., weekdays.

Please notify us at your earliest convenience regarding the completeness of this package.

Sincerely,

Jud Kurlanchek, Director of Building, Planning and Zoning



VILLAGE OF KEY BISCAIYNE  
**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAIYNE MASTER PLAN**

July 5, 2006

P.K. Sharma  
Lead Planner  
South Florida Water Management District  
Post Office Box 24680  
West Palm Beach, FL 33416-4680

Re: Adopted Key Biscayne Evaluation and Appraisal Report

Dear Mr. Sharma:

Enclosed is the adopted Village of Key Biscayne Evaluation and Appraisal Report. This package contains:

1 CD-Rom with the adopted EAR, advertisement for the adoption hearing, and minutes from the adoption hearing on CD-Rom

The public hearing for adoption was held on April 25, 2006. A copy of the adopted EAR is also being sent to:

Department of Community Affairs  
South Florida Regional Planning Council  
Florida Department Transportation District 6  
Florida Department of Environmental Protection  
Florida Department of State, Historical Preservation  
Miami-Dade County  
City of Miami

These packages are being sent simultaneously with this transmittal to your agency. If you have questions regarding the EAR, please contact me, or our consultants Silvia Vargas or Lindsey Withrow:

**Jud Kurlanchek**  
Key Biscayne Dept. of Building, Planning, and Zoning  
88 West McIntyre Street  
Key Biscayne, FL 33149  
Tel: 305.365.8908; Fax: 305.365.5556  
[VKBBZP@aol.com](mailto:VKBBZP@aol.com)

**Lindsey Withrow and Silvia Vargas**  
Wallace Roberts Todd  
191 Giralda Avenue, Penthouse,  
Coral Gables FL, 33134  
Tel: 305.448.0788; Fax: 305.443.8431  
[lwithrow@cg.wrtddesign.com](mailto:lwithrow@cg.wrtddesign.com);  
[svargas@cg.wrtddesign.com](mailto:svargas@cg.wrtddesign.com)

The report has been posted for public review on the internet and at Key Biscayne Village Hall (88 West McIntyre Street, Key Biscayne, FL), Key Biscayne Public Library (299 Crandon Boulevard, Key Biscayne, FL), and the Key Biscayne Community Center (10 Village Way, Key Biscayne, FL) between 8:30 A.M.-12:00 PM and 1:00-4:30 P.M., weekdays.

Please notify us at your earliest convenience regarding the completeness of this package.

Sincerely,

A handwritten signature in blue ink, which appears to read "Jud Kurlanchek for".

Jud Kurlanchek, Director of Building, Planning and Zoning





# VILLAGE OF KEY BISCAIYNE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

July 5, 2006

Mark Woerner  
Chief of Metropolitan Planning Section  
Miami-Dade County Planning and Zoning  
111 N.W. 1st Street, Suite 1210  
Miami, FL 33128

Re: Adopted Key Biscayne Evaluation and Appraisal Report

Dear Mr. Woerner:

Enclosed is the adopted Village of Key Biscayne Evaluation and Appraisal Report. This package contains:

1 CD-Rom with the adopted EAR, advertisement for the adoption hearing, and minutes from the adoption hearing on CD-Rom

The public hearing for adoption was held on April 25, 2006. A copy of the adopted EAR is also being sent to:

Department of Community Affairs  
South Florida Regional Planning Council  
Florida Department Transportation District 6  
South Florida Water Management District  
Florida Department of Environmental Protection  
Florida Department of State, Historical Preservation  
City of Miami

These packages are being sent simultaneously with this transmittal to your agency. If you have questions regarding the EAR, please contact me, or our consultants Silvia Vargas or Lindsey Withrow:

**Jud Kurlanchek**  
Key Biscayne Dept. of Building, Planning, and Zoning  
88 West McIntyre Street  
Key Biscayne, FL 33149  
Tel: 305.365.8908; Fax: 305.365.5556  
[VKBBZP@aol.com](mailto:VKBBZP@aol.com)

**Lindsey Withrow and Silvia Vargas**  
Wallace Roberts Todd  
191 Giralda Avenue, Penthouse,  
Coral Gables FL, 33134  
Tel: 305.448.0788; Fax: 305.443.8431  
[lwithrow@cg.wrtddesign.com](mailto:lwithrow@cg.wrtddesign.com);  
[svargas@cg.wrtddesign.com](mailto:svargas@cg.wrtddesign.com)

The report has been posted for public review on the internet and at Key Biscayne Village Hall (88 West McIntyre Street, Key Biscayne, FL), Key Biscayne Public Library (299 Crandon Boulevard, Key Biscayne, FL), and the Key Biscayne Community Center (10 Village Way, Key Biscayne, FL) between 8:30 A.M.-12:00 PM and 1:00-4:30 P.M., weekdays.

Please notify us at your earliest convenience regarding the completeness of this package.

Sincerely,

A handwritten signature in blue ink, which appears to read "Jud Kurlanchek for".

Jud Kurlanchek, Director of Building, Planning and Zoning



# VILLAGE OF KEY BISCAIYNE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

July 5, 2006

Harold Ruck  
Chief of Community Planning  
Planning Department, City of Miami  
444 SW 2nd Avenue, 3rd Floor  
Miami, FL 33130

Re: Adopted Key Biscayne Evaluation and Appraisal Report

Dear Mr. Ruck:

Enclosed is the adopted Village of Key Biscayne Evaluation and Appraisal Report. This package contains:

1 CD-Rom with the adopted EAR, advertisement for the adoption hearing, and minutes from the adoption hearing on CD-Rom

The public hearing for adoption was held on April 25, 2006. A copy of the adopted EAR is also being sent to:

Department of Community Affairs  
South Florida Regional Planning Council  
Florida Department Transportation District 6  
South Florida Water Management District  
Florida Department of Environmental Protection  
Florida Department of State, Historical Preservation  
Miami-Dade County

These packages are being sent simultaneously with this transmittal to your agency. If you have questions regarding the EAR, please contact me, or our consultants Silvia Vargas or Lindsey Withrow:

**Jud Kurlanchek**  
Key Biscayne Dept. of Building, Planning, and Zoning  
88 West McIntyre Street  
Key Biscayne, FL 33149  
Tel: 305.365.8908; Fax: 305.365.5556  
[VKBBZP@aol.com](mailto:VKBBZP@aol.com)

**Lindsey Withrow and Silvia Vargas**  
Wallace Roberts Todd  
191 Giralda Avenue, Penthouse,  
Coral Gables FL, 33134  
Tel: 305.448.0788; Fax: 305.443.8431  
[lwithrow@cg.wrtddesign.com](mailto:lwithrow@cg.wrtddesign.com);  
[svargas@cg.wrtddesign.com](mailto:svargas@cg.wrtddesign.com)

The report has been posted for public review on the internet and at Key Biscayne Village Hall (88 West McIntyre Street, Key Biscayne, FL), Key Biscayne Public Library (299 Crandon Boulevard, Key Biscayne, FL), and the Key Biscayne Community Center (10 Village Way, Key Biscayne, FL) between 8:30 A.M.-12:00 PM and 1:00-4:30 P.M., weekdays.

Please notify us at your earliest convenience regarding the completeness of this package.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jud Kurlanchek for".

Jud Kurlanchek, Director of Building, Planning and Zoning



VILLAGE OF KEY BISCAYNE  
**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAYNE MASTER PLAN**

**Village Council Adoption Resolution**



VILLAGE OF KEY BISCAYNE

Office of the Village Clerk

*Village Council*  
Robert Oldakowski, *Mayor*  
Robert L. Vernon, *Vice Mayor*  
Enrique Garcia  
Steve Liedman  
Jorge E. Mendia  
Thomas Thornton  
Patricia Weinman

*Village Clerk*  
Conchita H. Alvarez, CMC

CERTIFICATION

STATE OF FLORIDA  
COUNTY OF MIAMI-DADE

I, Conchita H. Alvarez, duly appointed Village Clerk of the Village of Key Biscayne, Florida, do hereby certify that the attached is a true and correct copy of:

Resolution No. 2006-23 adopted by the Village Council on June 13, 2006.

IN WITNESS WHEREOF, I hereunto set my hand and affix the Seal of the Village of Key Biscayne, Florida, this 22nd day of June, 2006.



*Conchita H. Alvarez*  
Conchita H. Alvarez, CMC  
Village Clerk  
Village of Key Biscayne, Florida



# VILLAGE OF KEY BISCAIYNE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

## RESOLUTION NO. 2006-23

**A RESOLUTION OF THE VILLAGE COUNCIL OF THE VILLAGE OF KEY BISCAIYNE, FLORIDA, ADOPTING THE EVALUATION AND APPRAISAL REPORT FOR THE VILLAGE OF KEY BISCAIYNE MASTER PLAN; STATING THE INTENT OF THE VILLAGE COUNCIL TO AMEND THE MASTER PLAN BASED UPON RECOMMENDATIONS CONTAINED IN THE REPORT; APPROVING TRANSMITTAL OF THE REPORT TO THE DEPARTMENT OF COMMUNITY AFFAIRS IN ACCORDANCE WITH SECTION 163.3191, FLORIDA STATUTES; PROVIDING FOR EFFECTIVE DATE.**

WHEREAS, pursuant to Chapter 163, Part 2, Florida Statutes and Chapters 9J-5, 9J-11 and 9J-12, Florida Administrative Code (F.A.C.), the Village of Key Biscayne Master Plan (the "Plan") was adopted via Ordinance No. 95-8 on September 12, 1995; and

WHEREAS, the Florida Legislature intends that local planning be a continuous and ongoing process; and

WHEREAS, Section 163.3191, Florida Statutes, directs local governments to periodically assess the success or failure of their adopted comprehensive plans to adequately address changing conditions and state policies and rules; and

WHEREAS, Section 163.3191, Florida Statutes, directs local governments to adopt an evaluation and appraisal report once every seven (7) years assessing the progress in implementing the local government's comprehensive plan; and

WHEREAS, the Village Council, in its capacity as the Local Planning Agency (the "LPA") has prepared and completed an Evaluation and Appraisal Report (the "EAR") for the Plan as provided for in Exhibit "A"; and



# VILLAGE OF KEY BISCAYNE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAYNE MASTER PLAN

WHEREAS, on April 25, 2006, the LPA held an advertised public hearing on the proposed EAR, provided for participation by the public in the process and rendered its recommendations to the Village Council; and

WHEREAS, the Village Council has reviewed the EAR, held an advertised public hearing, and provided for comments and public participation in the process in accordance with the requirements of state law and the procedures adopted for public participation in the planning process.

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE VILLAGE COUNCIL OF THE VILLAGE OF KEY BISCAYNE, FLORIDA, AS FOLLOWS:

**Section 1. Recitals Adopted.** That each of the recitals stated above is hereby adopted and confirmed.

**Section 2. Adoption.** That the Evaluation and Appraisal Report, attached as Exhibit "A", is hereby adopted and approved for transmittal to the Department of Community Affairs for the purpose of a sufficiency review in accordance with Section 163.3191, Florida Statutes.

**Section 3. Intent to Amend Master Plan.** That the Village Council does hereby state its intention to amend the Village of Key Biscayne Master Plan in accordance with the recommendations contained in the Evaluation and Appraisal Report.

**Section 4. Transmittal.** That the Village Clerk or his or her designee is hereby directed to make the appropriate transmittals as required by law.

**Section 5. Effective Date.** That this Resolution shall be effective immediately upon adoption hereof.



VILLAGE OF KEY BISCAIYNE  
**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAIYNE MASTER PLAN**

PASSED AND ADOPTED this 13th day of June, 2006.

MAYOR ROBERT OLDAKOWSKI

ATTEST:

CONCHITA H. ALVAREZ, CMC, VILLAGE CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

VILLAGE ATTORNEY



F:\100\103001\Resolutions\Council approval of EAR 3.27.06.doc





## VILLAGE OF KEY BISCAIYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

## Executive Summary

The Village of Key Biscayne Master Plan was adopted on September 12, 1995, and accepted by the Department of Community Affairs on October 20, 1995. Preparation of Key Biscayne's first Evaluation and Appraisal Report (EAR) reveals that the Village has diligently implemented the Master Plan's goals, policies, and objectives with few exceptions.

### The EAR Process

Key Biscayne's first EAR was prepared and adopted pursuant to Florida Statutes, Section 163.3191. This EAR was developed by a Council-appointed committee of residents, referred to as the 2020 Vision Plan/Evaluation and Appraisal Report Committee, with the assistance of the Building, Zoning and Planning, Finance; Public Works, and Parks and Recreation Department staffs, as well as the Village Manager, Village Attorneys and other Village departments, all supported by the active and engaged leadership and direction of the Village Council. In addition, consultants engaged by the Village, Wallace, Roberts & Todd, LLC, provided valuable background, structure and advice.

2020 Vision/EAR Committee Members represented a broad array of local constituencies and viewpoints, and also added relevant and valuable experience, expertise and background to the EAR process. The Committee, and a sub-committee selected to address issues related to the EAR in particular, met more than a dozen times over a period of 10 months to complete this task. Each Committee and Sub-Committee meeting was open to public attendance and comment. Further, the Committee reached out actively to the community at large, and implemented a vigorous public participation program in addressing the EAR. The result were vigorous, informed and wide-reaching debates, touching on virtually all aspects of the Master Plan, and on residents' individual and collective sensibilities about Key Biscayne, and future challenges and opportunities.

This EAR was undertaken simultaneously and on a parallel track with a local "visioning" and planning exercise referred to as "2020 Vision". The 2020 Vision exercise and EAR work were mutually interconnected and supportive. The work and focus of each informed the other. The 2020 Vision Statement was adopted by the Village Council as an exercise in self-criticism and self-definition, and as a source of guidance for at least a fifteen year time horizon. The 2020 Vision Statement is printed in full in the EAR, and its tenets and possible planning implications remain under consideration for possible inclusion in future Master Plan amendments.





## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

### EAR Findings

The EAR addresses the inquiries and follows the requirements specified in Florida Statutes, Section 163.3191, manifesting particular attention to the list of Major Issues presented to the Florida Department of Community Affairs (DCA) in a Letter of Understanding on March 7, 2005 and incorporating recommendations included in the DCA's response.

Following an introduction, which includes a reprint of the 2020 Vision Statement, the EAR assesses current and projected conditions and changes in the community since adoption of the 1995 Master Plan. Key points include:

- While Key Biscayne is an area of moderate population growth in comparison to other municipalities in Miami-Dade County, its growth rate is dropping and its population is predicted to level by 2010 according to Miami-Dade County projections.
- The percentage of people over the age of 65 has dropped over the past decade as the number of family households with children under the age of 18 has grown. In the report's evaluation of the coordination of land use and public school planning, it found that increased County-wide demand on educational facilities and services emphasizes the need for cooperation and synchronization between jurisdictions.
- No land has been annexed, no land is available for annexation, and no vacant lots remain in Key Biscayne. Future growth will occur in the form of redevelopment. The composition of the Village will continue to evolve as older housing stock is knocked down and replaced by larger dwelling units, a trend that is evident today and likely to continue until around 2047.
- All new construction and redevelopment since 1995 has occurred in accordance with the Future Land Use Map and complies with FEMA and Coastal High Hazard Area regulations.
- Assessments of current and forecasted infrastructure levels of service for transportation, sanitary sewer and potable water, and solid waste management reveal facilities adequately equipped to meet predicted demand and emphasize the need for continued interlocal cooperation.

The EAR then analyzes in detail each element of the 1995 Master Plan, including successes, impediments and status, taking into account past implementation, pending work and changed conditions. Overall, the Village has very successfully implemented the Plan, either already completing projects or on track to do so.

As a prelude to specific Master Plan amendments proposed in the EAR, we then analyze our principal local issues, from today's perspective but also in terms of the 1995 Master Plan objectives, policies and goals. These issues include:



## VILLAGE OF KEY BISCAIYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

- Definition, Preservation and Enhancement of Key Biscayne's Unique Village Character and Quality of Life.
- The Need for Additional Local Parks, Recreation Space and Open Space.
- Calusa Park, Crandon Park, Bill Baggs Cape Florida State Park and Virginia Key - Interlocal Cooperation Relative to Village Issues.
- Implications of Redevelopment.
- Traffic Volume, Operations and Safety.
- Sustainability of Local Retail and Services.
- Vulnerability to Damage from Tropical Storms and Hurricanes.
- Need to Improve or Replace Infrastructure.
- Implications of Debt Cap.
- Conservation, Coastal Management and Environmental Protection.
- Land Development in the Context of Master Plan Goals, Objectives, and Policies.
- Historic, Cultural and Educational Resources and Needs.

We then consider the extent to which our Master Plan is consistent with other Florida growth management laws, based on changes since 1995. The Master Plan is substantially in compliance with relevant changes; where not, modifications to the Master Plan have been suggested.

Finally, we address our conclusions and various recommendations for Master Plan amendments. In addition to updating dates, removing obsolete policies and objectives, and making modifications to the Future Land Use map, our recommendations include:

- Undertake studies of traffic congestion and levels of service.
- Create a Transportation Element, which requires coordinating the Future Land Use Map and creating numerical indicators to measure achievement of mobility goals.
- Place a greater emphasis on the Village's commitment to exploring innovative solutions for the provision of affordable housing, including exploring housing subsidy programs and housing feed trust fund and coordinating with the City of Miami and Miami-Dade County, and the South Florida Regional Planning Council.
- Explore new ways to integrate green technologies into public facilities.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

- Update the Master Plan within 18 months of the South Florida Water Management District updating the regional water supply plan.
- Coordinate with the Miami-Dade Water and Sewer Authority regarding the availability of water to serve all proposed development projects.
- Consider means of revenue-raising to support public trust acquisition of recreation lands and open space and preservation of historic landmarks.
- Prepare a strategy for buying land in the Village to be dedicated as recreational space.
- Negotiate use agreements with Miami-Dade County and the City of Miami for access to parkland outside Key Biscayne
- Review and revise current regulations to require that any future development proposed in the Village that contains apartments provide open space to serve the demand created by the population increase.
- Explore instituting an recreational impact fee for new single-family detached and residential duplex construction
- Pursue the renovation of available space at Calusa Park into active playing fields. If it is in accordance with the Calusa Park Master Plan, connect the playing fields to Harbor Drive via a pathway, building a mangrove boardwalk to Biscayne Bay, and construct a boardwalk to the Tennis Stadium at Crandon Park. (See Section 6 Conclusions and Recommendations, Recommendation ROS7)
- Work with the Miami-Dade County Parks and Recreation Department to develop a public tennis program at the Tennis Center at Crandon Park. (See Section 6 Conclusions and Recommendations, Recommendation ROS8)
- Continue to buy land in the Village and/or lease land on a long term basis for recreation and open space purposes.
- Acquire acquire land for a bayfront park.
- Extend the lease with St. Agnes Catholic Church and provide for the general public's use of this facility.
- Enter into public/private partnerships which result in recreation and open space in locations zoned for institutional and commercial use.
- Accept developer contributions and donations of property should opportunities arise that are advantageous to all parties.
- Include 530 Crandon Boulevard in the inventory of recreation and open space lands when its current use as a staging area is complete.



VILLAGE OF KEY BISCAINE

**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAINE MASTER PLAN**

- Establish criteria for updating and prioritizing projects within the CIP tied to concurrency requirements.

We conclude by highlighting the ongoing nature of this work, as we continue discussion about our 2020 Vision and related ideas to protect and improve the characteristics of and aspirations for Key Biscayne that we have identified as defining and valuable.



## EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

### 1. Introduction

#### ***a. Master Plan and Initial EAR***

The Village of Key Biscayne was incorporated on June 23, 1991. Previously, the community was part of unincorporated Miami-Dade County. The Village of Key Biscayne Master Plan was adopted by the Village Council, by Ordinance 95-8, on September 12, 1995, and accepted by the Department of Community Affairs on October 20, 1995. In anticipation of incorporation, committees of interested residents actively studied Key Biscayne and growth management principles beginning in approximately the fall of 1990. Active public participation resulted, focusing especially on various qualities that were thought to define Key Biscayne as it was in the past, as it had become, and as it could be in the future. Broad public interest in these questions continues today.

This is Key Biscayne's first Evaluation and Appraisal Report (EAR), developed pursuant to F.S., Section 163.3191. This EAR was developed with the active participation and assistance of a committee of residents appointed by the Village Council, called the 2020 Vision/EAR Committee, and other residents, as well as Wallace Roberts & Todd, consultants to the Village.

#### ***b. Profile of the Community.***

Bounded by Crandon Park to the north and Bill Baggs Cape Florida State Park to the south, the Village of Key Biscayne occupies approximately 1.5 square miles<sup>1</sup> in the center of Key Biscayne, the southernmost sandy barrier island in a chain of islands extending along the Atlantic coast of the United States. The island's deep sands overlying coral rock differentiate Key Biscayne, positioned just southeast of downtown Miami, from the rocky Florida Keys and support distinctive beach, dune, hammock and mangrove ecosystems. Due to its relatively low elevation and direct exposure to the Atlantic Ocean, Key Biscayne is in a high-risk flood zone; it is classified by FEMA as flood elevation AE and often one of the first areas in Miami-Dade County to be evacuated in a storm emergency. The only vehicular access to and from the mainland is via the four-to-six lane Rickenbacker Causeway. The Village has experienced storm damage in the past, most recently as a result of Hurricane Wilma in October 2005.

---

<sup>1</sup> Land area covers 1.28 square miles, water area covers 0.12 square miles with a total incorporated area of 1.39 square miles.



## VILLAGE OF KEY BISCAIYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

The transformation of Key Biscayne from a coconut plantation into a quiet Miami bedroom community bordered by parks began with the dedication of the first Rickenbacker Causeway (a drawbridge) and Crandon Park in November 1947. The southern two-thirds of the island were platted in several subdivisions with different lot sizes and restrictions. The Mackle Construction Company and other developers built hundreds of modestly priced one-story homes in the 1950s and 1960s that were purchased primarily by WWII veterans and young families. The Mackles built an elementary school and Key Biscayne Hotel and Villas, which catered to tourists. The southern third of the island escaped development and became Cape Florida State Park in January 1967. Key Biscayne received international attention in 1969 when then U.S. President Richard Nixon established his "Florida White House" complex on the bay side of the island. The publicity of Presidential visits through 1973 sparked awareness of Key Biscayne as a destination. An increase in development and real estate value was triggered by the 1987 opening of the high-span William Powell Bridge, which replaced an existing drawbridge. By the late 1980s, Key Biscayne had become a mature suburb within unincorporated Miami-Dade County, known for its quiet natural beauty and small-town character.

The Village of Key Biscayne was incorporated on June 23, 1991 after nine years of citizen effort toward self-governance. The vote to incorporate capped a long effort to obtain better services from the County, improved fiscal control, and local control over growth within the Village. A charter with a Council-Manager form of government was adopted to provide for local control over development, improved infrastructure and services, and better governmental process. Many improvements that were desired in 1991 have been achieved through the efforts of local government as well as the determination and commitment of Key Biscayne residents. The effectiveness of self-governance was validated by the creation of new, first-rate Fire Rescue and Police Departments and, by 1996, a Zoning Code tailored to meet the development needs of the Village.

In 1995, after years of public education and participation, the Village of Key Biscayne adopted its first Master Plan, which identified deficiencies and needed or desired improvements. Many of the Plan's goals, objectives, and policies have been realized. In addition to excellent fire-rescue and police services, the Village has an attractive (and debt-free) Village Green; more local parks; a renourished beach with protective dune systems; a vastly improved stormwater drainage system; an expanded K-8 public school; an architecturally distinguished Civic Center complex; a new, highly-used Community Center; reduced Village-wide speed limits; street-by-street tree plantings and landscaping, street lights and pavers,



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

sidewalks, landscaped traffic calming devices; and the lowest millage rate of any municipality in Miami-Dade County.

The Village of Key Biscayne in 2005 enjoys outstanding natural beauty and the best of both worlds: a sense of separateness as a serene, secure island sanctuary coupled with convenient access to services, activities and amenities on the mainland. Key Biscayne's popularity as a destination for both daily and seasonal tourists will continue. Residential, commercial and hotel properties are largely built out, yet the community is changing again via redevelopment.

### ***c. Purpose of the EAR.***

The purpose of the EAR is to evaluate and assess the effectiveness, successes and failures of a local municipality's master plan in accomplishing its adopted objectives, policies, and standards as well as to suggest ensuant changes or amendments. The State of Florida's local government master planning law, Chapter 163, Part 2, Florida Statutes (F.S.) requires that all counties and municipalities throughout Florida maintain master planning programs to guide their long-range growth and development, and that master planning should be a continuous and ongoing process. As a part of this process, local governments are required to monitor numerous community characteristics relating to development, provision of services, environmental protection, and governmental activities, and to periodically prepare Evaluation and Appraisal Reports addressing implementation of the master plan. Moreover, the law provides that the EAR process shall be the principal process for updating local master plans to respond to changes in state, regional, and local policies on planning and growth management, and changing conditions and trends, to ensure effective intergovernmental coordination, and to identify major issues regarding the community's achievement of its goals.

### ***d. Summary of EAR Requirements and Process.***

As required by Sec. 163.3191(2), F.S., the EAR must address the following items:

1. Major local issues as identified by the local government with input from state agencies, regional agencies, adjacent local governments and the public, and the potential social, economic, and environmental impacts of these issues.
2. Location of existing development with respect to the location of development as anticipated in the Key Biscayne Master Plan, as





## VILLAGE OF KEY BISCAIYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

adopted in 1995; population growth and changes in land area, including any annexations, and the extent of vacant and developable land.

3. Effect on the Master Plan of changes to the state comprehensive plan, Chapter 163, Part 2; Chapter 9J-5, Florida Administrative Code (FAC); and the strategic regional policy plan, since the adoption of the Master Plan.
4. Whether Master Plan objectives within each element have been achieved with respect to major local issues.
5. The extent to which unanticipated and unforeseen problems or opportunities have occurred since the 1995 Master Plan adoption, or resulted in problems or opportunities with respect to the major local issues and their social, economic, and environmental impacts.
6. Identification of any corrective actions or measures, including whether plan amendments are recommended, to address the major local issues identified and analyzed in the EAR.
7. Coordination of the Master Plan with existing public schools and those identified in the applicable educational facilities plan adopted pursuant to Chapter 1013.35, F.S.; assessment of the success or failure of the coordination of the future land use map and associated planned residential development with public schools, and joint decision-making processes between the local government and the school board toward establishing appropriate population projections, and the planning and siting of public school facilities.
8. Consideration of the appropriate water management district's regional water supply plan, and revision of the potable water element to include a work plan covering at least a 10-year planning horizon for building any water supply facilities identified as necessary to serve existing and new development, and for which the local government is responsible.
9. Evaluation of whether any reductions in land use density within the coastal high-hazard area impairs the property rights of current residents upon redevelopment, including that following a natural disaster.
10. Process for public involvement.

F.S. Section 163.3191 further specifies the procedures and criteria for the preparation, transmittal, adoption, and sufficiency review of local government's EARs and EAR-based Master Plan amendments, if any. By agreement with the Department of Community Affairs (DCA), Key Biscayne's adopted EAR will be transmitted to the South Florida Regional



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

Planning Council (SFRPC) for sufficiency review. DCA will retain ultimate review authority.

If the EAR recommends Master Plan amendments, such amendments will be consistent with the findings and recommendations contained in the adopted EAR. F.S. Section 163.3191 requires EAR-based Master Plan amendments to be adopted within eighteen (18) months after the EAR is determined to be sufficient.

An EAR is required to be completed every seven (7) years, subject to scheduling as determined by DCA. This constitutes the first evaluation and appraisal of the Key Biscayne Master Plan. This EAR reflects the Village's best efforts at interpreting the major issues and factors to be addressed and the scope of work contained in the Letter of Understanding between DCA and the Village (included in the Appendices of this document), as well as the Florida Statutes, Administrative Code, and other guidance documents issued by DCA.

### ***e. Process for Public Involvement***

This EAR was prepared and adopted pursuant to Florida Statutes, Section 163.3191. The EAR was developed by a Council-appointed committee of residents—referred to as the 2020 Vision Plan/Evaluation and Appraisal Report Committee—with the assistance of the Village staff and consultants Wallace Roberts & Todd, LLC, as well as the support and leadership of the Village Council.

2020 Vision/EAR Committee Members represented a broad array of local constituencies and viewpoints, and also added relevant and valuable experience, expertise and background to the EAR process. The Committee, and a sub-committee selected to address issues related to the EAR in particular, met more than two dozen times over a period of 10 months to complete this task. Each Committee and Sub-Committee meeting was open to public attendance and comment. Further, the Committee reached out actively to the community at large, and implemented a vigorous public participation program to address the EAR. The result was informed and wide-reaching debates that touched on virtually all aspects of the Master Plan—on residents' individual and collective sensibilities about Key Biscayne, and on future challenges and opportunities.

This EAR process was undertaken simultaneously and on a parallel track with a local "visioning" and planning exercise referred to as "2020 Vision". The 2020 Vision exercise and EAR work were mutually interconnected



## EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAYNE MASTER PLAN

and supportive. The work and focus of each informed the other. The 2020 Vision Statement was adopted by the Village Council as an exercise in self-criticism and self-definition, and as a source of guidance for at least a fifteen year time horizon. The 2020 Vision Statement is printed in full in the following section, and its tenets and possible planning implications remain under consideration for possible inclusion in future Master Plan amendments.

### ***f. Key Biscayne 2020 Vision.***

The preparation of this EAR was conducted in close coordination with an ambitious community visioning process, which began in April 2005. To ensure a fully coordinated, consensus-driven outcome, the Village Council appointed a broadly representative residents' steering committee—the 2020 Vision/EAR Committee—to guide both processes. The visioning process is intended to create a framework for strategic decision-making to guide the long term future of the community.

The 2020 Vision process began with a series of public committee and sub-committee meetings culminating in SWOT (Strengths, Weaknesses, Opportunities and Threats) exercises conducted with the 2020 Vision/EAR Committee (April 11, 2005), the Village Council (June 28, 2005), and the community at large (June 9 and June 11, 2005). In all, approximately 150 individuals took part in this step, providing extensive input about the community's concerns, values, aspirations, and priorities. The exercises sought responses from participants on two questions pertaining to present conditions in the Village, and two questions pertaining to perceptions or expectations about future conditions, as follows:

#### *Present Strengths and Weaknesses:*

- *What present characteristics of Key Biscayne do we consider strengths (qualities worth retaining) and attributes that define our character and quality of life?*
- *What characteristics can we categorize as weaknesses (problems or deficiencies requiring attention)?*

#### *Future Opportunities and Threats*

- *What opportunities should we seize to improve character and quality of life of the Village in the future?*
- *Which conditions or trends can we interpret as threats to our character or quality of life which we should prevent?*



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

Although hundreds of ideas and comments were recorded, a reasonably clear consensus emerged on the top priority issues in each of the discussion topics, which are summarized below.

## KEY AREAS OF COMMUNITY CONSENSUS

### Strengths

1. ***Strong Sense of Community:*** the island's history; the neighborliness and friendliness of its residents; an engaged citizenry; and the physical smallness of the community—create a strong sense of community self-awareness and a desirable "small-town" environment.
2. ***Quality of Life:*** the community's self-reliance; a safe, peaceful, and quiet setting; the beauty, environmental value, and quality of government, services and amenities contribute to an exceptional quality of life.
3. ***Location:*** the advantages of convenient proximity to major employment and activity centers in Miami-Dade County, coupled with the separation and distinct island identity.
4. ***Natural setting/Environment:*** the beauty, amenity, and environmental value of a barrier island with a tropical landscape and climate, the scenic open space and dual waterfront, on the bay and ocean.
5. ***Community Services and Facilities:*** the elementary (K-8) school, Village Green, civic center, public safety, and myriad recreational opportunities.

### Weaknesses

1. ***Community Facilities and Services:*** recreational opportunities abound, but insufficient parks and playing fields and a lack of land for future public facilities, deficient maintenance of the community's public spaces.
2. ***Mobility, Transportation and Parking:*** traffic congestion, lack of pedestrian/bike/golf cart provisions and related safety concerns, lack of connectivity between individual commercial uses, as well as between the commercial and residential areas, and issues related to what is perceived as unsatisfactory performance of existing traffic calming treatments/poor execution of traffic calming techniques.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

3. **Growth and Development Impacts:** perception of excessive density, the construction of new homes which are out of scale with the size of lots and with the surrounding development, blocked views of the water, and overcrowded facilities.
4. **Changing Community:** a growing non-permanent/transient population; the loss of "island spirit," which is manifest in, among other things, a lack of respect for the community's public areas, apathy/lack of involvement, and seeming elitism and sense of entitlement.
5. **Infrastructure:** deficiencies cited include the incomplete central sewer, the presence of overhead utilities, storm drainage problems, and poor road maintenance.
6. **Planning/Zoning/Regulations:** weak or ineffective planning and regulations; lack of long-term "vision"; lack of or inconsistent enforcement.
7. **High Cost of Living:** higher costs associated with living in a coastal community, from disaster insurance to construction costs, increasing property values, and lack of affordable housing; all have the effect of decreasing the diversity of the community.
8. **Limited Range of Retail and Services:** in particular, the small number and variety of restaurants, the narrow range of retailers and services, and limited cultural/entertainment features and venues.

### Opportunities

1. **Parks and Open Space:** to acquire land for additional parks, to expand ocean/bay access, to develop trails and protect natural areas.
2. **Community Services/Facilities/Amenities:** to expand the recreation center, to build a community theater and other cultural facilities, to improve education and consider a high school.
3. **Improve Transportation/Circulation:** to reduce vehicular congestion, provide additional facilities/improve connectivity for pedestrian, cyclists and golf carts, provide commercial area access from Fernwood, and expand public transportation and traffic calming.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

4. **Development/Redevelopment Controls:** to control density and intensity, preserve needed services and businesses, control building scale, and improve landscape requirements.
5. **Community Interactions:** to improve communication/dialogue among diverse community groups as well as between the Village and its residents, to improve civic involvement.
6. **Seniors and Families:** to provide for elder care on island, encourage affordable housing.
7. **Infrastructure:** to improve road conditions, expand/complete the sewer system, to upgrade lighting, signage, landscaping, and stormwater.

### Threats

1. **Overpopulation/Unfettered Development:** rezonings to increase density, oversized homes impacting older neighborhoods, loss of "small town" character.
2. **Impacts of External Development:** excessive development/traffic generation from Virginia Key and causeway development.
3. **Degradation of the Environment:** beach erosion, pollution, and the loss of biological diversity, open space and scenic beauty.
4. **Traffic/Mobility/Parking:** congestion and delays related to the single island accessway, increased traffic, safety problems.
5. **Village Government:** unresponsive, bureaucratic, over-restrictive, fiscal limitations, lack of intergovernmental coordination.
6. **Loss of Community Character/Identity:** degraded aesthetics, loss of community spirit, factionalism, excess tourism/visitation.
7. **Hurricanes/Natural Threats:** lack of preparedness, failure to evacuate, power failures, storm surge.
8. **High Cost of Living:** ever-escalating property values and taxes are perceived as a potential threat to the quality of life and socioeconomic diversity of the community.
9. **Schools:** lack of high school, overcrowded classrooms.





## **EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN**

### ***10. Crime/Illegal Activity***

The input received through the SWOT exercises, and the resulting areas of community consensus identified in the above summary, provided the "raw material" for the articulation of the Key Biscayne 2020 Vision Statement, which follows:

### ***2020 Vision Statement***

#### ***Key Biscayne in 2005: What We Value***

Surrounded by parks, Biscayne Bay and the Atlantic Ocean, the Village of Key Biscayne enjoys outstanding natural beauty, a compelling sense of place, lush landscaping, and a unique small-town ambiance that leads many residents and visitors to call it "Island Paradise". Our close proximity to metropolitan Miami-Dade County allows us to enjoy the best of both worlds: a sense of separateness as a serene, secure island sanctuary coupled with convenient access to services, activities and amenities on the mainland.

Our relaxed island style is evident in our people, our active lifestyles, and our shared enjoyment of living "across the bridge" in a close-knit, nurturing community. The Village is a vibrant and interactive place made more interesting by our cultural diversity, neighborliness and commitment to fellowship and community spirit.

#### ***The Past as Prologue: Aspirations and Accomplishments***

The Village of Key Biscayne was incorporated on June 23, 1991 to provide for local control over development, improved infrastructure and services, and better governmental process. We adopted a charter, elected our first Village Council (then called the Board of Trustees), hired a manager, and built our local government from scratch. In turn, we established fire-rescue, police and other departments and adopted zoning and other municipal codes.

In 1995, after years of public education and participation, we adopted our first Master Plan. Our Master Plan identified deficiencies and provided for many needed or desired improvements. Because of our early vision, planning and follow through, we now enjoy excellent fire-rescue and police services, a debt-free Village Green, an architecturally distinguished Civic Center complex including a well-used Community Center, more local





## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

parks, a renourished beach with protective dune system, a vastly improved stormwater drainage system, an expanded K-8 public school, street-by-street tree plantings and landscaping, street lights and pavers, sidewalks, landscaped traffic calming devices, reduced Village-wide speed limits, and the lowest millage rate of any municipality in Miami-Dade County.

### ***2020 Vision Statement: Keeping the “Village” in our Village***

Now, a decade after adopting our Master Plan, we are developing our first Master Plan Evaluation and Appraisal Report, as required by law. As an interconnected exercise, we also are developing this Vision Statement as the first part of a Vision Plan for 2020. Recognizing that the 1995 Master Plan benefited from prior years of study, visioning and community participation, we sought extensive public input for our 2020 Vision, engendering lively debates.

We speak about “Keeping The ‘Village’ in Our Village”. This means that we wish the Village to retain the intrinsically positive qualities described herein. Our 2020 Vision is meant to supplement our Master Plan by communicating our values and goals and by suggesting strategies and actions to achieve those goals. By implementing our Vision Plan, in the ensuing years through 2020 we will have:

### ***Community Character and Quality of Life***

- Maintained our small-town, island character by managing the scale and density of development on a neighborhood-by-neighborhood basis.
- Enhanced our streetscapes, parks, civic realm and open spaces with a well-maintained subtropical plant palette suited to our island.
- Practiced responsible stewardship of our natural environment by protecting our tree canopy, natural habitats, beaches, dunes, and nearshore water quality.
- Expanded our array of passive parks, open spaces and active recreation facilities through carefully directed property acquisition and redevelopment, to include small-scale neighborhood parks, a restored, protected Calusa Park with improved pedestrian access, additional playing fields and bikeways and trails.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

- Enhanced local high-quality education from early childhood programs to lifelong learning for adults, in close coordination with public and private schools.
- Expanded our cultural facilities, activities, special events and historic preservation efforts, and provided a physical setting for a cultural center, theater and local history museum.
- Maintained extremely high levels of quality and responsiveness in our government departments, including police, fire and emergency medical services.
- Worked effectively with the State of Florida, Miami-Dade County and the City of Miami to influence and mitigate the impact of new development on Virginia Key and of visitors to the regional attractions and parks that surround the Village.
- Expanded and improved visual and physical access to Biscayne Bay and the Atlantic Ocean.
- Recognized the positive economic impact of tourism and the role of hotels in providing amenities to residents and as community partners.

### ***Sustainable Community Structure***

- Encouraged redevelopment of outdated commercial areas to preserve and expand local-serving retail and professional businesses and services in well-designed, accessible and interconnected centers.
- Attained safe, pleasant and convenient pedestrian and cycling linkages between neighborhoods, schools, parks, civic and recreational sites and commercial properties.
- Established a well-integrated vehicular transportation system that:
  - provides for maximum safety considerations;
  - successfully manages traffic congestion from residents, day visitors, workers, and special events;
  - reduces local use of automobiles by encouraging pedestrian, bicycle and golf cart transport;
  - expands transit use, including off-island bus routes and on-island shuttles;



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

- incorporates well-designed and constructed traffic calming applications;
  - improves local access to Crandon Boulevard commercial areas from Fernwood Road; and
  - includes a proactive street maintenance program.
- Upgraded our infrastructure where feasible and affordable by expanding sewer service in areas formerly served by septic systems, by replacing antiquated water pipe systems, and by burying overhead utilities.

### ***People and Relationships***

- Encouraged volunteerism and community involvement, and included citizens as active participants in civic affairs and community service.
- Provided our multi-generational community with rich civic, cultural, recreational, and educational opportunities for children, youth, adults and seniors.
- Promoted effective and respectful communication among residents who have different opinions.
- Encouraged and provided programs and solutions by which young adults and senior citizens can remain residents of the Village.

### ***Governance***

- Operated our government in a transparent, respectful, responsive and efficient manner, using innovative communication methods to raise citizen awareness.
- Managed judiciously our tax revenues, public spending, debt and capital projects, and identified clear criteria for spending priorities.
- Provided excellent public safety services for our residents and visitors.
- Maintained Village property and landscaping at high levels of excellence.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

- Effectively engaged the City of Miami, Miami-Dade County and the State of Florida on regional issues that influence the quality of life in the Village.
- Partnered with the City of Miami and Miami-Dade County to implement a Virginia Key Master Plan that ensures environmentally sensitive development, a new high school, lighted playing fields, and traffic mitigation along the Causeway.

### ***Conclusion: Changes, Opportunities and Challenges***

The 2020 Vision Statement is being drafted at a time of continued change in the Village of Key Biscayne. The commercial properties at our Village entrance, the oceanfront Silver Sands Motel, and various apartment and condominium properties are susceptible to near-term redevelopment. The ultimate use of the Village owned property facing Crandon Boulevard and the Civic Center is undetermined. Starting in 2006, the existing Sonesta Beach Resort will be demolished and rebuilt. Comprehensive new development is planned for Virginia Key and must be closely monitored to assure compatible uses and manageable Causeway impacts.

Without foresight and planning, many improvements we value and even take for granted today may not have come about. We recognize the successes that came from our previous planning efforts and we will continue to plan and act for our best future. The attention we give to the future strengthens our community today and helps instill in our children and neighbors a valued ethic of citizenship. These are worthy goals in themselves.

Change is both inevitable and not entirely predictable, and "Keeping The 'Village' in Our Village" is not necessarily assured. With this in mind, we hope the vision and planning contained in this document will be of lasting value to the Village by informing the decisions, and guiding the actions, of future residents and Village Councils. Above all, we mean to preserve those values, standards and ideals that define our vision of Island Paradise.



## EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

### 2. Community-Wide Assessment

#### *a. Population Growth and Changes in Land Area.*

The Miami-Dade County Department of Planning and Zoning (MDCDPZ) identifies Key Biscayne as an area of moderate growth in comparison to other municipalities in the County. According to the U.S. Census, the population of Key Biscayne increased from 8,854 people and 3,831 households in 1990 to 10,507 individuals and 4,529 households in 2000. The additional 1,653 persons equate to a 19 percent growth in population, or about 1.9% per year. By comparison, during the same decade the total population of the County—the eighth largest in the nation by population—increased by 316,268 individuals and 84,419 new households, a growth rate of approximately 16%.

The University of Florida reported the 2004 population of the Village to be 11,160, producing an average yearly growth rate between 2000 and 2004 of 1.6 percent. This drop in the growth rate compared to the preceding decade mirrors an increasingly limited supply of undeveloped land on the island.

The average size of families in the Village increased from 2.85 persons per family in 1990 to 2.99 persons per family in 2000; the average household size grew from 2.31 to 2.47 over the same period. These increases may be correlated to an overall worsening in traffic congestion, perhaps due to an informally observed increase in the number of cars per household in the Village. According the State Department of Motor Vehicles, the number of registered vehicles in January 2006 is 10,582. The Department is currently unable to provide historical data for the purposes of comparison.<sup>2</sup> However, the figure provided may serve as the basis for a future study analyzing the patterns in internally-generated traffic congestion.

Family households with children under the age of 18 grew from 939 in the 1990 U.S. Census, to 1,404 in 2000 (approximately 32% of the total households), an increase of 465 families with children. Overall, the population under the age of 18 years in the Village grew by almost 55% between 1990 and 2000 (from 1,646 to 2,547). Today, children under the

---

<sup>2</sup> According to the DMV, due to the prior configuration of its database, historic registered vehicle counts derived from addresses or zip codes may be inaccurate. It was possible for a vehicle to mistakenly be counted more than once: the address field was associated with the customer, not to the vehicle record; therefore, if a customer changed his or her address more than once in a calendar year, the vehicle record would have been double-counted.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

age of 18 years represent 24.2% of the total population. This trend has burdened the capacity of local schools and is critical to short, medium, and long term educational facility planning. To address this problem, in February 2003, Key Biscayne signed an interlocal agreement with Miami-Dade County Public Schools and 24 municipalities to coordinate region-wide educational facilities planning, site selection and acquisition, and construction.

The percentage of people over the age of 65 has dropped over the past ten years. Whereas in 1990, persons 65 years or old comprised 17.2 percent of the population, in 2000 they were 15.6 percent. Despite its overall decrease in percentage of total population composition, the aging population continues to be particularly affected by the island's limited supply of affordable housing—Key Biscayne's long-term elderly residents are often not able to afford the increase in taxes when they attempt to downsize—and evacuation during tropical storms and hurricanes. To address the latter issue, in early 2006, a committee will convene to explore the vulnerability of residents during and after severe storms. Comprised of residents and led by the fire chief, the Committee will emphasize assisting the elderly and others who may have restricted mobility and health needs.

Census figures support a related trend anecdotally reported by residents: formerly transient apartments and condominiums once occupied by retirees and empty-nesters are now occupied by families who live in Key Biscayne year round. A comparison of the percentage of total households in 1990 and 2000 comprised of a person age 65 or older living alone dropped from 9.1 to 8.9, respectively.

Key Biscayne's population growth has caused no changes in land area, in large part because natural geographic boundaries prevent the opportunity for annexation.

### ***b. Ethnicity and Race Components.***

The 2000 U.S. Census describes the racial makeup of the Village as 95.46% White, 0.46% African American, 0.01% Pacific Islander, 0.14% Native American, 0.92% Asian, 1.49% from other races, and 1.52% from two or more races.

In the year 2000, 49.79% of the Village's population was classified as "of Hispanic origin of any race." This represents an increase of 38%, or 1,441 persons of Hispanic or Latino origin, since 1990.



# VILLAGE OF KEY BISCAYNE

## EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAYNE MASTER PLAN

Notably, as recently as 1980, there was no majority group in Miami-Dade County. Rather, there were three large ethnic groups: non-Hispanic Whites, Hispanics and Blacks. This balance began to shift, and became very evident in the 1990s. In 2000, Miami-Dade County was the first and only county in Florida with a Hispanic majority (57%). Although Key Biscayne has not yet crossed that threshold, it is very close.

**Table 1: Ethnicity Change in Key Biscayne and Miami-Dade County, 1990-2000**

Ethnicity	1990		2000	
	Key Biscayne	Miami-Dade Co.	Key Biscayne	Miami-Dade Co.
White (Non-Hispanic)/%	4,897/55%	585,607/30%	5,059/48%	465,772/21%
Black (Non- Hispanic)/%	36/<1%	369,621/20.5%	28/<1%	427,140/20%
Other (Non-Hispanic)/%	131/1%	28,459/1%	190/2%	68,713/3%
Hispanic%/	3,790/43%	953,407/49%	5,236/50%	1,291,737/57%
Total	8,854	1,937,094	10,513	2,253,362

Sources: U.S. Census Bureau, 1990 and 2000 Census, 2003 Miami-Dade County EAR

Over 54%, or 5,723 persons, of the 2000 Key Biscayne population were born outside the U.S.—although 46% of that number is comprised of naturalized or native citizens. Of those born abroad, 76.6% were natives of Latin America.

**Table 2: Nativity and Place of Birth, 2000**

	Key Biscayne	% Increase
Native	5,199	49.6
Born in U.S.	4,754	45.4
Born in Florida	2,054	19.6
Born in different state	2,700	25.8
Born outside U.S.	445	4.2
Naturalized citizen	2,224	21.2
Not a citizen	3,054	29.2
Total	10,477	

Sources: 2000 U.S. Census, ePodunk

Nearly 59% of the total population of Key Biscayne speaks Spanish at home, but only 14.4% of this group described their command of the English language as less than proficient, according to the 2000 U.S. Census.

### ***c. Population Projections.***

This EAR will rely primarily on population projections generated by MDCDPZ. The projections were updated in 2003 to reflect Census 2000





# VILLAGE OF KEY BISCAIYNE

## EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

data, and were used by Miami-Dade County in the preparation of its own EAR, which was adopted in 2003 as the basis for the County's Comprehensive Development Master Plan amendments.

According to the Miami-Dade County EAR, the 2003 projections were developed in the same manner as previous series with estimates for births, deaths, and net migration made separately, and then combined to arrive at the totals used in this report. As with all projections, assumptions are made about a number of factors—in particular those related to net migration flows. Based on observable trends, countywide immigration, comprised of mostly foreign migrants, is expected to be constant and to remain at fairly high levels.

For Key Biscayne, the projections generated by MDCDPZ indicate that, while the population will continue to increase in the County as a whole, the local rate of growth will trend toward zero after 2010 as the Village approaches build-out capacity (estimated at approximately 5,800 dwelling units at current zoned densities. Using average family size reported by the 2000 Census, the build-out population would be approximately 17,400. Using average household size, the build-out population is projected to be 14,326).

**Table 3: Annual Average Change, Population Projections for  
Key Biscayne and Miami-Dade County, 1990 to 2025**

Area	Change 1990-00	Change 2000-03	Change 2000-10	Change 2010-15	Change 2015-20	Change 2020-25	Remaining Capacity	Population at Capacity
<b>Key Biscayne</b>	166	216	109	-35	0	0	0	11,425
<b>Miami-Dade Co.</b>	31,608	29,729	29,792	30,366	31,014	32,320	30,778	3,050,563

Source: Miami-Dade County Department of Planning and Zoning, Research Section, 2003.

**Table 4: Population Projection Comparison Between  
Key Biscayne and Miami-Dade County**

	2000	2003	2010	2015	2020	2025
<b>Key Biscayne</b>	10,507	11,160	11,600	11,425	11,425	11,425
Increase	--	647	440	-175	0	0
Percent Increase	--	6.2%	3.9%	-0.98%	0	0
<b>Miami-Dade County</b>	2,253,362	2,342,551	2,551,283	2,703,114	2,858,184	3,019,785
Increase	--	89,189	208,732	151,831	155,070	161,601
Percent Increase	--	3.9%	8.9%	5.9%	5.7%	5.7%

Source: 2000 Census; Miami-Dade County Department of Planning and Zoning, Planning Research, 2003.

Reaching build-out capacity does not imply no further development will take place. Rather, as the Village arrives at this stage, future growth will be in the form of redevelopment. Therefore, the Village should capitalize on opportunities to guide this redevelopment in a manner consistent with



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

the community's vision, to explore ways to retain and enhance existing development, and to introduce new, activities that expand the self-sufficiency of the Village.

### ***d. Extent of Vacant and Developable Land.***

In 1995, there were 86 acres of vacant land according to the 1995 Key Biscayne Master Plan. No land has been annexed since that time—Bill Baggs Cape Florida State Park extends along the entire southern border of the island community; Miami-Dade County's Crandon and Calusa Parks span the entire northern edge; Biscayne Bay fronts the western border; and the eastern border faces the Atlantic Ocean—and today all of those original vacant lots have been developed or have permits for development.<sup>3</sup>

The Village, though almost entirely built out, is slightly below capacity by measure of densities permitted by the Land Development Code. This gap is not large enough to allow any major increases in density, but the composition of the Village will continue to evolve as older housing stock is knocked down and replaced by larger dwelling units, a trend evident today. Examination of residential certificates of occupancy records indicates that since 1997 approximately 26 new residential units per year have been built either on vacant lots or in place of demolished units (See Table 5). Since there are no vacant lots remaining as of March 2006, all future new construction will occur in the form of replacement of older units. If the average rate of replacement remained constant, the stock of original housing would be completely replaced by around 2047.<sup>4</sup>

While the density of units is presumed to remain relatively constant, the population could continue to increase in the single family realm since many existing, modestly sized, residential structures are being redeveloped into substantially larger homes containing additional bedrooms. Although no study has been conducted to evaluate the actual occupancy of these units, if each bedroom were filled, the Village's

---

<sup>3</sup> A sizeable parcel—9.5 acres—of formerly vacant land along Crandon Boulevard (previously known as the "Tree Farm") has been dedicated as Public Recreation and Open Space in the form of the Village Green. A bandstand and gazebo were added to the Village Green in 2000. Today, this open space serves as the primary location for most of the holiday and other special events celebrated by the community throughout the year.

<sup>4</sup> There are approximately 1300 single and duplex lots in the Village. Since 1997, 232 units on those lots have been replaced, leaving 1068 units of the original housing stock. Dividing 1068 units by the average rate of replacement, 26 units per year, yields a duration of approximately 41 years until the residential character completely shifts from small-scale to large-scale development.



## VILLAGE OF KEY BISCAINE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

population could increase significantly, with potentially dire consequences on the demand for infrastructure and services.

**Table 5: Key Biscayne Residential Certificates of Occupancy, 1995 - 2005**

Year	Single Family	Duplex	Total Permits
1997	3	0	3
1998	22	0	22
1999	32	0	32
2000	35	0	35
2001	40	2	42
2002	22	0	22
2003	30	1	31
2004	22	1	23
2005	19	3	22
Total	225	7	232

\* As of February 13, 2006; Figures represent new construction on vacant land or following complete demolition.

Source: Village of Key Biscayne Department of Building, Zoning and Planning, February 2006.

Any redevelopment of the two largest and most influential developments of residential composition over the past ten years—the Grand Bay Residences and Ritz-Carlton Hotel (799 units) and Ocean Club (1,032 units)—would be subject to a rigorous approval process by the Village Council, which is required to comply with state-mandated density restrictions for Coastal High Hazard Areas. Because both of the projects' original permits have since expired, redevelopment density could not exceed current density. The Village inherited the two Developments of Regional Impact from Miami-Dade County when it incorporated in 1991. Setting a precedent for density allowance, the Village immediately and successfully pursued the reduction of the projects' permitted capacity on the basis of insufficient parks and recreation space and an undue burden on infrastructure.

Due to natural market forces, there has been little new construction on the Village's 25.8 acres zoned for low-intensity commercial use, and minimal redevelopment of its approximately 400,000 square feet of existing commercial space since the adoption of the Master Plan in 1995 (See Table 6). One noteworthy exception is 200 Crandon Boulevard, known as Key Colony Place. In the process of being completed as of March 2006, the shopping plaza will incorporate pedestrian-oriented design features promoted by the Village.



VILLAGE OF KEY BISCAIYNE

**EVALUATION AND APPRAISAL REPORT (EAR) OF THE  
KEY BISCAIYNE MASTER PLAN**

**Table 6: Key Biscayne Commercial Building Permits, April 2000 – April 2005**

Year	New Construction	Complete Demolition	Other Permits (renovations, additions, etc.)	Total Permits
2000	3	1	40	44
2001	1	0	48	49
2002	2	1	46	49
2003	1	3	26	30
2004	1	0	31	32
2005	0	0	7	7
Total	8	5	198	211

*Source: Village of Key Biscayne Department of Building, Zoning and Planning, May 2005.*

***e. Location of Development in Relation to Master Plan.***

All new construction and redevelopment since 1995 has occurred in accordance with the Future Land Use Map and designations adopted in the Key Biscayne Master Plan. There have been three amendments to the Future Land Use section since the Master Plan was adopted:

- Ord. 95-8 amended densities permitted within the “Medium Density Multifamily and Ocean Resort Hotel” land use category in the Master Plan, separating the tabulation of density for multifamily residential uses and hotel uses located on the same lot.
- Ord. 97-17 amended the land use designation on the Future Land Use Map from Medium Density Single Family Residential to Two Family Residential for seventeen parcels of property on Fernwood Road specified in the appendix of that ordinance.
- Ord. 2000-1 amended the Future Land Use Map for the property at 800 Crandon Boulevard, changing it from the “office” to “commercial” category.

Commercial development along Crandon Boulevard since the 1995 Master Plan includes the Pankey Institute along the east side of the entry block and the following developments along the west side: Suntrust Bank at 500 Crandon Boulevard (10,750 square feet), Wachovia Bank at 100 Crandon Boulevard (4,426 square feet), and Ace Hardware commercial/office building at 800 Crandon Boulevard (8,000 square feet). As of March 2006, construction of Key Colony Place (28,000 square feet), a new commercial complex located at 200 Crandon Boulevard, is in progress.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

A new fire station, Village Hall (Administration/Police), and Community Center have been constructed during the past five years on the blocks immediately south of the Village Green. This complex is now recognized as the community's "Civic Center". The 1995 Master Plan projected that the "Civic Center," purposefully located at the geographic center of the community, would help establish linkages from the existing commercial district and east-of-Crandon multi-family neighborhoods to the then Key Biscayne Community School (now Key Biscayne K-8 Center) and its surrounding single-family residences. The creation of the Civic Center provided opportunities to implement urban design and architectural practices and techniques that embody the strong sense of place and unique identity and character of the Village of Key Biscayne.

The largest-scale projects in the Village have been the Ocean Club and Grand Bay Residences and Ritz-Carlton Hotel projects<sup>5</sup>. Both are located on the Atlantic Ocean on the east side of the island, and are designated as Developments of Regional Impact. The 38-acre Grand Bay project, consisting of two condominium towers, 49 detached residences, and what is now the Ritz-Carlton Hotel totals 707 units. It was completed in 2001 and issued its final Certificate of Occupancy by the Village in the same year. The Ocean Club, occupying 52 oceanfront acres, consists of 800 condominium residences in six mid-rise buildings with four to seven stories each (known as Lake Villas), plus five high-rise buildings with 14 to 18 stories each. The property also includes a 5-acre private lake, tennis club, beach club, cabanas, restaurant, and other amenities. The Master Plan for The Ocean Club was approved by the Village of Key Biscayne in July 1995. Four of these buildings were permitted by the Village and built between 2001 and 2002.

Although some residential development has occurred as infill on vacant platted lots, permit records indicate that the bulk of the Village's residential construction is taking place on previously developed lots (refer to Table 5). The 1995 Master Plan also recommended setback, height, minimum pervious area requirements and other controls to mitigate the impact of larger new construction (typically 3,500-4,000 sq. ft. 2 to 3 story houses) on smaller adjacent homes (typically 1,200-1,500 sq. ft. 1 story houses).

However, these efforts to control bulk intersected with Federal Emergency Management Agency (FEMA) rules concerning rebuilding of homes in flood hazard areas. Increased enforcement of these regulations occurred after Hurricane Andrew hit South Florida in 1992. For areas such as Key

---

<sup>5</sup> The projects are identified in South Florida Regional Planning Council records as Key Biscayne Hotel and Villas, and Hemmeter/Continental Resort, respectively.



## VILLAGE OF KEY BISCAIYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

Biscayne with an AE flood hazard rating, FEMA requires the first finished floor of new construction to be elevated 5 feet above base flood elevation, adding to the building height. Following Hurricane Andrew, while Key Biscayne was still operating under the Dade County Code, there was a frenzy of residential redevelopment in the Village. Much of it was relatively massive in scale and constructed on fill, which resulted in a disparities in elevation and stormwater runoff problems for the older housing stock. When the Village adopted its own zoning code, it tailored regulations to prevent this type of development from occurring.

While many long-time residents lament the loss of original, small-scale Key Biscayne homes, they also realize that change in housing styles is inevitable based on property values, to meet the needs of today's families and to comply with FEMA regulations. The 1995 Master Plan and subsequently enacted zoning code included provisions that afford owners of older housing stock opportunities to expand their homes, recognizing this may be the only feasible option for some. The zoning code also contained incentives intended to reduce the bulk and lot coverage of newly constructed residences.

Key Biscayne does not have a working waterfront that meets the definition in Florida State House Bill 955 and therefore it is not subject to the related requirements of that House Bill.

### ***f. Infrastructure Levels of Service.***

#### **(1) Transportation**

The Village of Key Biscayne sets forth Level of Service standards for transportation in Objective 1.2 of the Master Plan's Capital Improvements element. The timing of development will be regulated to maintain the following peak hour LOS standards:

Arterial:	LOS "E"; LOS along Crandon Boulevard could potentially fall slightly below "E" near north Village limits
Collectors:	LOS "B"
Local Service Streets:	LOS "A"

The 1995 Comprehensive Plan identified four significant road segments in its level of service capacity analysis: Crandon Boulevard N. of Harbor Drive; Crandon Boulevard from Harbor Drive to Village Limits; Harbor Drive from Crandon Boulevard to Mashta Drive, and





## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

Mashta Drive from Harbor Drive to Crandon Boulevard. All four were operating at a peak-hour weekday LOS of D or better. The data indicated that there were no existing deficiencies with respect to the Key Biscayne quality of traffic flow. Because of this, no roadway improvements were scheduled for Key Biscayne in the Miami-Dade County Transportation Improvement Program.

The Crandon Boulevard Master Plan study, completed in February 2004, examined county-owned Crandon Boulevard, the only major arterial in the Village of Key Biscayne (other local roads belong to the Village). The study analyzed the usage patterns and volumes of vehicular traffic along to determine if any deficiencies existed, assessed the extent and nature of any deficiencies and recommended appropriate geometric and operational improvements. The traffic analysis utilized the concept of level of service as the measure of traffic performance.

Pursuant to classifications determined by the Florida Department of Transportation<sup>6</sup> and the Transportation Research Board, Crandon Boulevard must be maintained at a Level of Service D. According to the Crandon Boulevard Master Plan, the arterial is in compliance at the segment carrying the highest traffic load within the Village—the Crandon Boulevard corridor north of the Crandon/Harbor Drive/Ocean Lane signalized intersection—at three of the six signalized intersections. Ocean Lane Drive itself is LOS B. However, the road's remaining three signalized intersections operate at a Level of Service E or worse during peak times of the day. According to the Crandon Boulevard Master Plan, improvements, which are currently underway, will elevate these deficient areas to meet or exceed state standards. Crandon Boulevard and Harbor Drive will be improved from LOS E to LOS D; Crandon Boulevard and Key Colony Entrance will be improved from LOS E to at least an LOS D; and Crandon Boulevard at West Wood Drive will be improved from an LOS F to at least an LOS D when the Village completes its conversion of all roads earmarked in the Crandon Boulevard Master Plan.

The following policies should be added to the Master Plan:

- Schedule a traffic study to assess the impact of internally generated traffic congestion.
- Schedule a traffic study to assess the LOS of collector and local streets.

---

<sup>6</sup> Source: FDOT Quality/Level of Service Handbook, November 2002, p 129.





## VILLAGE OF KEY BISCAYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAYNE MASTER PLAN

- In Policy 1.1.1, change the designation for arterial roadways from LOS “E” to LOS “D.”
- Designate Fernwood Road as a transitional road between residential and commercial. At the rear lot line of specific commercial centers on Crandon Boulevard, require that access points be opened where appropriate to pedestrians, golf carts and, on a limited basis, to vehicular traffic.
- To better encompass the spectrum of transportation facilities, the Traffic Circulation Element shall be renamed the Transportation Element.
- Coordinate the Future Land Use Map with the transportation system.
- Establish numerical indicators to measure achievement of mobility goals.
- Conduct a public transit feasibility study.

## (2) Sanitary Sewer and Potable Water

The Master Plan sets the following standards for the sanitary sewer and potable systems in Objective 1.2 of the Capital Improvements element.

Sanitary Sewers in Sewered Areas:	Not to exceed 98% of County treatment system's rated capacity. Average sewage generation standard of 140 gallons per capita per day.
Sanitary Sewers in Unsewered Areas**:	Permit septic tanks only in compliance with county and state standards.
Potable Water:	Not to exceed 98% of County treatment and storage system's rated capacity, with at least 20 lbs. per sq. inch at property line and average 280 gallons per capita per day.

\*\*The second standard for sanitary sewers (in unsewered areas) will become obsolete when the Village completes its conversion of all remaining residential parcels on septic to sewer.

At the time the Comprehensive Plan was written, there was no master meter that enabled WASD to calculate average Village sewage



## VILLAGE OF KEY BISCAIYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

generation or the percent of the total system flow coming from Key Biscayne. Instead, the County estimated that the Village was adding about 1,187,000 gallons per day into the WASD collection system. Although there have been no acute problems with sewage, from time to time there has been evidence of septic tank effluent percolating to the surface. The Comprehensive Plan recommended that the entire Village be served by sanitary sewers, with the first priority being the residential streets adjacent to Biscayne Bay. The Plan estimated that approximately 300,000 per day would be generated by the Village's 2003 permanent plus seasonal population after the sewer was extended. The existing county-wide system treatment capacity at the time was 298,000,000 gallons per day and the WASD indicated sufficient capacity to serve Key Biscayne.

In 1995, the entire Village was served by the WASD water distribution system. A pair of mains (one 12 inch and one 24 inch) follow Crandon Boulevard into the Village. The WASD treatment and distribution system is interconnected and therefore considered a single system, whose capacity is calculated as the sum of the capacity of all three treatment plants. The combined capacity of this system was 403,000,000 gallons per day with a maximum daily flow of 306,000,000 in 1991. As in the case of sewage, there was no master water meter. The County estimated that the Village consumed an average of 2,374,000 gallons per day. There were no problems or projected needs related to potable water demands in Key Biscayne. The projected permanent plus seasonal population increase was expected to increase water consumption by 470,000 gallons per day by 2003 and half that amount by 1998.

Key Biscayne continues to be identified as a Miami-Dade Water and Sewer Authority Collection Areas in Miami-Dade County's 2003 EAR. According to Objective 2 of the MDC Master Plan Water and Sewer Sub-element 2.5.1, the County has guaranteed that it will maintain procedures to ensure that any facility deficiencies are corrected and that adequate facility capacity will be available to meet future needs; Key Biscayne assists the County in achieving this endeavor by cooperating to biannually update estimates of system demand and capacity.

According to the County's EAR, system-wide wastewater treatment facilities have the capacity to process 352.50 million gallons per day, which surpasses the average daily demand of 310.81 million gallons per day. An evaluation of the projected rated system water capacities and the estimated maximum demand shows that capacity is available



## VILLAGE OF KEY BISCAYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAYNE MASTER PLAN

in Key Biscayne's service district through 2020 at a level that would satisfy the Village's own service standards. See Table 7. However, to ensure continued provision of adequate sanitary sewer service, the County has allocated \$1.3 billion in capital sanitary sewer projects.

**Table 7: WASD Water System Capacity and Demand Comparison, 1995-2020**

Year	Maximum Day Capacity (MGD)	102 Pct. Of Max. Day Demand (MGD) for the Preceding Year
1995	427.60	396.78
2000	454.77	399.13
2005	495.03	451.55
2010	520.03	487.36
2015	563.03	517.34
2020	563.03	547.74

MGD = Million Gallons per Day

Source: Miami-Dade Water and Sewer Department

WASA operates three regional wastewater treatment plants in the North, Central, and South Districts. Geographically, Key Biscayne falls within Service District 2, "Central." However, according to the Miami-Dade County EAR, the boundaries of the districts are flexible; the system is interconnected, allowing flows from one district to be diverted to other plants in the system. This flexibility, along with a significant reduction in average flow into the regional system due to extensive infiltration and inflow prevention work since 1994, has allowed the County to meet demands<sup>7</sup> and is expected to permit the Village to meet its own Level of Service Standards for sanitary sewer.

The potable water to Key Biscayne is circulated as part of an interconnected County-wide system. Similar to the sewer system, the Village cooperates with the County and other affected agencies to estimate system demand and capacity.

According to Miami-Dade County's 2003 EAR, in 2003 the capacity of the County's water system is 454.77 million gallons per day, surpassing the average daily demand of 346.10 million gallons per day and the Village's aforementioned Level of Service Standard. Miami-Dade County currently has programmed \$883 million in water capital

<sup>7</sup> Source: 2003 MDC EAR 2-152. In the mid-1990s, the County agreed to undertake more than \$1.169 billion worth of improvements to its wastewater treatment plants, transmission mains and sewage collection system. Major improvements include construction of a new Biscayne Bay sewer line, a force main interceptor in Flagler Street, a South Miami-Dade transmission main and new mains in North Miami-Dade. The County is subject to fines of \$10,000 per day if it fails to complete the project on schedule.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

improvements projects to ensure its ability to continue to provide capacity to meet system-wide existing and projected demand. The County's programmed capital improvements and the Village's continued prudent provision of land development regulations and the concurrency system should allow for the Potable Water Level of Service to be met.

According to the Miami-Dade County EAR, the County has continued to maintain sufficient capacity in both the regional water and wastewater system to meet demand. Levels of Service standards have generally been met throughout the reporting period, and additional policies under the objective have also exhibited progress.

### Water Supply (with respect to the long-range water supply facilities work plan of the South Florida Water Management District (SFWMD))

Chapter 163, Florida Statutes, requires the preparation of a 10-year Water Supply Facilities Work Plan by local governments with water supply facility responsibilities. Key Biscayne does not have water supply facility responsibilities. However, it will comply by continuing to participate in intergovernmental coordination efforts and amending the Master Plan as necessary upon the adoption of the Lower East Coast Water Supply Plan. In light of MDWASA's recently publicized projected inability to meet long term demand of services, the Village of Key Biscayne will closely monitor any updates to capacity, support MDWASA in achieving its goals in any way feasible, and, if necessary, explore alternative mechanisms and sources for the provision of water and sewer.

It is recommended that the Village add new policies to the Master Plan regarding intergovernmental coordination:

- Seek and obtain a written statement from the Miami-Dade Water and Sewer Authority regarding the availability of water to serve all proposed development projects, including current and projected demand, remaining permitted water withdrawals, facility capacity, and scheduled capital improvement projects.
- Update the Master Plan within 18 months of the South Florida Water Management District updating its regional water supply plan, highlighting alternative water supply projects.
- Establish a single-point-of-contact at the South Florida Water Management District and Miami-Dade Water and Sewer Authority to determine the extent to which the Village will be



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

involved in the planning, financing, construction, and operation of water supply facilities that will serve the community.

- Verify with the Miami-Dade Water and Sewer Authority the availability of water before making changes to the Future Land Use Map.

### **(3) Solid Waste Management**

The Master Plan sets the following standards for solid waste in Objective 1.2 of the Capital Improvements element.

Solid Waste: County system maintains a minimum of 5 years capacity; Village use generation rate of 5.2 lbs. per person per day.

At the time the Comprehensive Plan was written, the Dade County Solid Waste Management Department was responsible for the collection of solid waste from single-family residential areas. A number of private firms served the multi-family and non-residential uses. The County's resource recovery facility on N.W. 58<sup>th</sup> Street was the disposal facility for Key Biscayne. The County projected that there would be adequate landfill capacity remaining at the facility until the Year 2009. The capacity of the Central transfer station was 4,000 tons with an average daily demand of 900 tons. No precise data indicating the existing Village solid waste generation was available at the time. However, the County estimated that the Village was generating about 31 tons per day.

Miami-Dade County continues to be responsible for processing solid waste delivered by a private hauler from the Village of Key Biscayne. It measures its Level of Service based on a combination of factors: the annual amount of waste processed at each County disposal facility; the annual amount of waste disposed of at each County transfer facility; and the amount of waste processed at private disposal facilities or exported out of the County.

According to the County's EAR, the County has committed to implement procedures to ensure that adequate solid waste facility capacity will be available to meet future needs. Based on a facility capacity analysis prepared by the Miami-Dade County Department of Solid Waste Management in 1999, the three disposal facilities owned and operated by Miami-Dade County through the year 2039 have the capacity to adequately meet internally generated LOS standards until



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

2011. According to the complete capacity analysis conducted by DSWM in 1999, Miami-Dade County in 2003 has some but not complete capacity for disposing of projected waste streams until the year 2032.

In April 2005, the Village increased revenues and appropriations for expenditures between October 1<sup>st</sup> 2004 and September 30, 2005 within the solid waste fund. The new total of \$545,162.00 was in accordance with its new contract with its service provider.

### ***g. Coordination of Land Use and Public School Planning.***

#### Interlocal Agreement

In February 2003, Key Biscayne cosigned an interlocal agreement with Miami-Dade County Public Schools and 24 regional municipalities. The agreement mandates semi-annual meetings attended by the County Mayor or designated representative, the Mayor or designated representative for each municipality, the School Board Superintendent to coordinate educational facilities planning, including site selection and acquisition, and construction. Furthermore, the committee discusses issues and formulates recommendations

- Population and student projections;
- Development trends; and
- A work program for five, ten, and twenty year intervals. This includes the school district's relationship to local government master plans, particularly as it relates to the identification of potential school sites in the master plan's future land use map series, schools needs (school capacity and school funding), collocation and joint use opportunities, and ancillary infrastructure improvements needed to support the school and ensure safe student access.

#### Inventory of Local Schools

There is a total of five public and private schools in the Village of Key Biscayne.

##### Key Biscayne K-8 Center<sup>8</sup>

- Public
- K-8<sup>th</sup> grade

##### Key Biscayne International Christian School

---

<sup>8</sup> Previously known as Key Biscayne Community School





## VILLAGE OF KEY BISCAIYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

- Private
- Pre-K through 6<sup>th</sup> grade

### St. Agnes Academy

- Private (Catholic)
- Pre-K through 8<sup>th</sup> grade

### St. Christopher's By-the-Sea Montessori School

- Private
- Pre-School through 6<sup>th</sup> grade

### MAST Academy

- Public magnet school focused on marine science and technology; not physically in Village, but rather in Virginia Key.
- 9-12<sup>th</sup> grade

All high school students commute to schools outside of the Village boundaries by public school bus, private vehicle, or private van service. Coral Gables Senior High is the feeder pattern (default) public high school for the Village. Students may apply for magnet public high schools where admissions are merit-based and lottery. Applications are made in the 8<sup>th</sup> grade for 9<sup>th</sup> grade admission. MAST Academy, located on nearby Virginia Key, is a desirable magnet school whose combined merit-based and lottery admissions process does not give preference to Key Biscayne residents. Many students attend private high schools located in Miami-Dade County.

### Changes in School Demand

Key Biscayne's demand on the public school system at large is growing. According to Census figures, the proportion of young children in Key Biscayne is increasing: in 1990, five to thirteen year-olds comprised 9.0 percent of the population, while in 2000 they made up 13.1 percent. Enrollment figures from Key Biscayne K-8 Center reflect this trend. Total school enrollment for the 2005 through 2006 school year is 1,028, up from 981 students during 2004-2005 and 976 during 2003-2004. To address deficient capacity (enrollment was at 155% of capacity during the 2004-2005 school year and at 122% of capacity between 2003-2004), the facility was expanded.

In October 2005, the Miami-Dade County Public Schools Department and the City of Miami jointly announced an initiative to improve public education in South Florida. Plans include the creation of a "commuter high school" as part of the City's five year "Education Compact" to





## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

address County-wide rapidly growing enrollment. Officials identified Virginia Key as a potential site.

The next step is for the Virginia Key Master Plan committee to locate six-acre parcels of land on Virginia Key suitable for a school. Key Biscayne is fully engaged in this process: in addition to Key Biscayne's current mayor's active involvement in high-level interlocal talks to locate a high school on Virginia Key, the Village Manager is a member of the group that selected the consultant of the Master Plan.

### ***h. Coastal High-Hazard Area development mitigation strategies.***

The Village of Key Biscayne is located within a Coastal High Hazard Area that also is designated an AE flood zone. Section 163.3191(2)(m), F.S., requires that local governments "evaluate whether past reductions in land use densities in coastal high hazard areas have impaired property rights of current residents where redevelopment occurs."

Goal 1 of the Master Plan's Future Land Use Section states, in part, "future residential development should be at the lowest densities consistent with protection of reasonable property rights." Objective 1.1 follows that the Village must "maintain existing development and achieve new development and redevelopment which is consistent with the community character statement articulated as Goal 1."

The Village has almost no vacant land and only redevelopment is anticipated to occur in residential areas. The island currently has four single family residential zoning designations. Island Residential includes 100 properties; Parkside Residential includes 51 properties; Village Estate includes 247 properties; and Village Residential includes 932 properties for a total of 1330 single family residences. There are three multi-family residential designations: Low, Medium, and High Density. No density reductions adversely impacting property rights have occurred or are projected to occur. However, the Village will continue to deny any development applications that would serve to increase density beyond what exists or is allowed by current zoning and/or vested rights.



## EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

### 3. Assessment of Master Plan Elements

#### a. *Future Land Use*

##### (1) Purpose of the Future Land Use Plan.

The purpose of the Future Land Use Chapter is to:

*“...prioritize the protection and enhancement of the Village’s residential character, while remaining sensitive to the Key Biscayne’s natural and commercial resources.”*

##### (2) Summary Assessment

The Master Plan for Key Biscayne was adopted shortly after the Village’s incorporation. The Plan’s Future Land Use section reflects its effort to create a formal framework to protect and maintain its residential character while complying with external standards. The Master Plan was written prior to the adoption zoning ordinances; therefore, many of its policies are directives for the Village to include and enforce specific provisions in the future Land Development Code. All such policies have been incorporated into the Land Development Code.

There have been no recent major changes to the Future Land Use Map, but new zoning categories have been added and used as necessary. See Future Land Use and Zoning Maps (Figures 1 and 2) on the following pages. There is no immediate foreseeable need for additional zoning or land use categories as future growth is forecasted to be minimal and consistent with current patterns.

The Village completed policies requiring an improvement of service and the drafting and implementation of a plan with moderate success; all of the projects are, at the very least, in progress. Amendments should be made to adjust the deadlines to coordinate with revised projected timelines.

##### (3) Recommended Amendments to the Future Land Use Element.

The following ordinances affecting the Future Land Use Element have been passed since the Comprehensive Plan was adopted.

Ord. 95-8 amended densities permitted within the “Medium Density Multifamily and Ocean Resort Hotel” land-use category in the Master Plan, separating the tabulation of density for multifamily residential uses and hotel uses located on the same lot.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

Ord. 97-17 amended the land use designation on the Future Land Use Map from Medium Density Single Family Residential to Two Family Residential for seventeen parcels of real property on Fernwood Road specified in an appendix (Ordinance 97-17).

The following amendments to the Future Land Use Element are being suggested as part of the Evaluation and Appraisal Report. (See Section 6 Conclusions and Recommendations)

- The language in Goal 1 of the Future Land Use should be strengthened to read, in part:
  - “Future residential development **shall** be at the lowest densities consistent with protection of reasonable property rights.”(See Section 6 Conclusions and Recommendations, Recommendation FLU1)
- The following changes should be made to the future land use map to reflect current and anticipated uses.
  - Government and Civic Center parcels at West McIntyre Street and Village Green Way should be reclassified from Commercial to Public and Institutional.
  - The Pankey Building (1 Crandon Boulevard) should be changed from Medium Density Multi-Family to Office.
  - The Esplanade should be changed from Office to Commercial
  - The Library (299 Crandon Boulevard) should be changed from Medium Density Multi-Family to Public and Institutional
  - The Beach Park should be changed from Medium Density Multi-Family to Public Recreational and Open Space
  - A portion of the Key Biscayne K-8 Center designated as Public Recreation and Open Space and should be adjusted. The eastern third should remain as Public Recreation and Open Space, but the remaining two-thirds should be categorized as Public and Institutional.
  - The 700 block of Fernwood Road should be recategorized from Two Family Residential to Single Family Medium Density Residential.
  - Village Lake Park should be recategorized from Low Density Multi-Family to Public Recreation and Open Space.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

(See Section 6 Conclusions and Recommendations, Recommendation FLU2)

- Language and dates referenced in the following policy and objective should be updated to read:
  - Policy 2.1.1: Complete (sanitary sewer extension) plan by **2008**.
  - Objective 2.2 and Objective 2.3: *Continue* to upgrade drainage system so outfalls in Biscayne Bay (and adjacent canals) fully meet NPDES standards and Chapters 17-25 and 17-302.500, F.A.C. *Continue* to upgrade private property on-site drainage standards to ensure retention of at least the first one inch of stormwater, and no more runoff after development than before.
  - Objective 2.6: Historic Preservation: prepare a list and strategy for preservation of potentially significant historic structures by **2010**.

(See Section 6 Conclusions and Recommendations, Recommendation FLU3)

#### (4) Evaluation of Goals, Objectives, and Policies of the Traffic Circulation Plan.

See matrix on following page.

#### (5) Future Land Use Plan Land Development Code Ordinances.

**Section 10-61(10):** Adequate drainage paths shall be provided around structures to guide stormwater runoff away from them.

**Section 16-64(c):** All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.

**Section 29 Stormwater Utility System:** The Village desires to create a stormwater management system to maintain and improve water quality, to control flooding that results from rainfall events, to deter unmanaged rainwater from eroding sandy soils, to deter the disruption of the habitat of aquatic plants and animals and to provide for the collection of stormwater utility fees for those expenses connected with the planning, constructing, operating and maintaining of a stormwater management system.



## VILLAGE OF KEY BISCAIYNE















# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

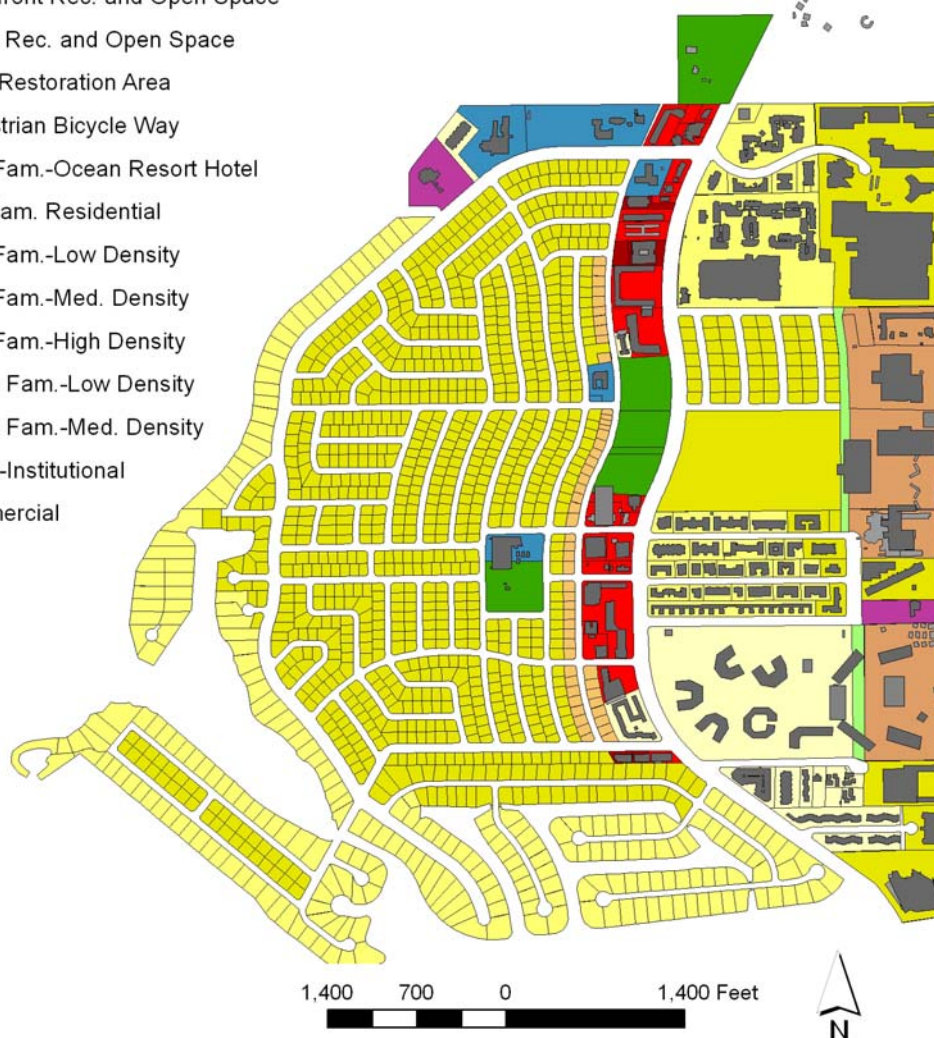
**Section 30-80(f)(6)h.2 Site Plan Review Procedures:** A map of the area showing where runoff presently goes and size, location, topography and land use of off-site areas which drain through, onto, and from the project.

**Section 30-18(g):** Drainage for all off-street parking facilities shall meet the requirements of the Metropolitan Miami-Dade County Planning, Development, and Regulation Landscape Manual.

**Figure 1: Key Biscayne Future Land Use Map**

### Future Land Use Categories

-  Waterfront Rec. and Open Space
-  Public Rec. and Open Space
-  Dune Restoration Area
-  Pedestrian Bicycle Way
-  Multi-Fam.-Ocean Resort Hotel
-  Two-Fam. Residential
-  Multi-Fam.-Low Density
-  Multi-Fam.-Med. Density
-  Multi-Fam.-High Density
-  Single Fam.-Low Density
-  Single Fam.-Med. Density
-  Public-Institutional
-  Commercial
-  Office







# VILLAGE OF KEY BISCAIYNE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

Figure 2: Key Biscayne Zoning Map

## Village Zoning

- Public Rec. and Open Space (PROS)
- Parks and Recreation
- County and State Parks
- Low Intensity Commercial (C-1)
- Low Intensity Office (O-1)
- Institutional (I)
- Government Use (GU)
- Private Club (PC)
- Hotel Resort (HR)
- Village Residential (VR)
- Village Estate (VE)
- Island Residential (IR)
- Parkside Residential (PR)
- Res. Multi-10 (RM-10)
- Res. Multi-16 (RM-16)
- Res. Multi-30 (RM-30)
- PUD-1
- PUD-2
- PUD-3



Key Biscayne Master Plan Evaluation & Appraisal Report





## VILLAGE OF KEY BISCAIYNE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

**Section 30-80(g)(4):** *Community services and utilities.* All proposed developments shall be designed and located in such a manner as to insure the adequate provision, use and compatibility of necessary community services and utilities. An adequate sanitary sewer collection system including all necessary extensions and connections, shall be provided in accordance with Village standards for location and design. Where necessitated by the size of the development and/or by the unavailability of Village treatment facilities, sanitary sewage treatment and disposal systems must be provided in accordance with Village and State standards and regulations.

**Section 30-80(g)(6):** *Level of service standards.* For the purpose of the issuance of development orders and permits, the Village has adopted level of service standards for public facilities and services which include roads, sanitary sewer, solid waste, drainage, potable water, and parks and recreation. All applicants are required to prove concurrency pursuant to the Land Development Regulations.

**Section 30-100:** Minimum pervious area percentages for Single Family and Two Family Districts; Grand Bay Villas and Estates.

**Section 30-100(d):** *Lot elevation.*

**Section 30-100(f)(3)a.4:** Mooring piles and dolphins may not extend more than 20 feet from a dock. Mooring piles and dolphins on Biscayne Bay shall not extend more than 25 feet from the bulkhead.

**Section 30-100(f)(3)a.5:** No dock shall extend from a bulkhead into any canal, lake, or waterway a distance greater than ten feet, or ten percent of the width of the waterway, whichever is less. Notwithstanding the foregoing, no dock or mooring pile shall extend into Biscayne Bay a distance of more than 25 feet from the bulkhead.

**Sec. 30-163. Level of service standards.** For the purpose of concurrency determinations, the Village has adopted a master plan that provides the LOS for public facilities and services: roads, sanitary sewer, solid waste, drainage, potable water, and parks and recreation. All developments that are subject to a finding of concurrency must be consistent with these standards. (Ord. No. 2000-5, § 2, 5-9-00)

**Section 30-230(f):** (The purpose and intent of establishing landscape standards is to:) Contribute to the processes of air movement, air purification, oxygenation regeneration, ground water recharge,





## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

stormwater runoff retention, while aiding in the abatement of noise, glare, heat, air pollution and dust generated by impervious areas.

**Drainage Plan:** Unless the Village Engineer determines that major drainage improvements are not feasible due to existing improvements on the property, site plan submittals shall contain a separate paving and drainage sheet(s) containing the following: Details of the proposed drainage system, including drainfield cross sections and lengths, catch basin types and sizes, designated retention, detention area cross sections, and the like.



# VILLAGE OF KEY BISCAIYNE

## EVALUATION AND APPRAISAL REPORT (EAR) OF THE

### KEY BISCAIYNE MASTER PLAN

Goals, Objectives, and Policies	Element	Implementation Status	Land Development Code reference
	<b>FUTURE LAND USE</b>		
<b>Goal 1</b>	Achieve desired community character: Key Biscayne should be a residential community. Development policies should protect residential character. Future residential development should be at the lowest densities consistent with protection of reasonable property rights. Hotels should be permitted in order to provide ocean access opportunities and respect an established land use pattern; however, they should be modest in size so as to not overpower the community's residential character. Other commercial development should be sized to meet the needs of residents and hotel guests. Office development should be limited to the minimum amount practical in light of existing development patterns.		
<b>Objective 1.1</b>	<b>Future Land Use Categories:</b> Maintain existing development and achieve new development and redevelopment which is consistent with the community character statement articulated as Goal 1.	<b>Implemented.</b> The Land Development Code is consistent with the Master Plan.	
Policy 1.1.1	By statutory deadline or sooner, enact and enforce land development code consistent with the Future Land Use Map (FLUM).	<b>Implemented: Ongoing.</b> At the time of adoption of the Master Plan the Land Development Code was based on County Zoning. However, VKB Single Family-Residential (SF-R) and remaining zoning districts were amended on 10/24/00 and 5/9/00, respectively to be made consistent with the Master Plan.	
Policy 1.1.2	Until adoption of a Land Development Code (LDC), regulate development according to the FLUM, including specified land uses, densities and intensities.	<b>Implemented.</b>	
Policy 1.1.3	By statutory deadline or sooner, enact and enforce provisions governing subdivisions, signs and floodplain protection consistent with the Master Plan (MP).	<b>Implemented.</b> See below.	
	<i>Subdivision regulations.</i>	<b>Implemented.</b> VKB uses the County's subdivision regulations.	
	<i>Sign regulations.</i>	<b>Implemented.</b> Sign regulations were based on County standards until they were amended to meet the needs of the VKB on 5/9/00 and again on 5/20/02	Ordinances: Section 28: Signs
	<i>Floodplain protection provisions.</i>	<b>Implemented.</b> Floodplain regulations are based on FEMA requirements as specified in the Master Plan. Additionally, the LDC was amended on 10/24/00 to establish maximum lot elevations for SF-R.	Ordinances: 30-100(d).
Policy 1.1.4	Establish a street tree master plan.	<b>Implemented.</b> Hurricanes Katrina and Wilma damaged many of the trees planted as part of the Village's Street Tree Plan.	
<b>Objective 1.2</b>	<b>Commercial Redevelopment:</b> By 2004, achieve private revitalization of at least one Crandon Boulevard property that has a blighting impact on the Village.	<b>Implemented.</b> The CVS shopping center was previously a vacant grocery store before being renovated in 2003. The parking lot, landscaping, and façades were all redone. The building at 800 Crandon Boulevard was a decaying service station site before it was demolished and replaced with a new hardware store in 2001. 560 Crandon was demolished in 2005; the site is currently being cleaned up for an office building.	
Policy 1.2.1	By statutory deadline or sooner, enact and enforce land development code standards and incentives to achieve new development, renovated development and or redevelopment that meets high signage, landscaping, circulation/parking and other standards.	<b>Implemented.</b> See below.	
	<i>All new development, renovated development and redevelopment consistent with FLUM.</i>	<b>Implemented.</b> At the time of adoption of the Master Plan, the LDC was based on County Zoning. However, VKB Single Family-Residential (SF-R) and remaining zoning districts were amended on 10/24/00 and 5/9/00, respectively, to make the LDC consistent with the MP.	
	<i>Sign regulations.</i>	<b>Implemented.</b> Sign regulations were based on County standards until they were amended to meet the needs of the VKB on 5/9/00 and again on 5/20/02	
	<i>Landscaping requirements.</i>	<b>Implemented.</b> Originally based on County code, Landscape Regulations were amended on 5/9/00 and again on 6/11/02 to meet the needs of the VKB.	
	<i>Parking requirements.</i>	<b>Implemented.</b> Originally based on County code, Parking Regulations were amended on 5/9/00 to meet the needs of the VKB.	
<b>Goal 2</b>	<b>Protect and enhance the residential, commercial, resort, and natural resource areas of the Village.</b>		
<b>Objective 2.1</b>	<b>Sanitary Sewer Facilities:</b> Extend public sanitary sewer to additional developed areas by 2008 and ensure effective septic and drain field functioning.	<b>In progress.</b>	
Policy 2.1.1	Cooperate with County to complete financial and engineering plan for sanitary sewer extension.	<b>In progress.</b> Re-designed along with replacement for H2O lines. Project completed and goal to be met by 2008.	



# VILLAGE OF KEY BISCAIYNE

## EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

	<i>Complete plan by 1998.</i>	In progress.	
	<i>Begin implementation as soon as possible to complete implementation by 2008.</i>	In progress.	
Policy 2.1.2	Enact and enforce installation requirements to ensure effective functioning of septic and drain fields.	Implemented. Based on DERM requirements.	
Objective 2.2	<b>Storm Sewer Infrastructure:</b> Upgrade drainage system so outfalls into Biscayne Bay (and adjacent canals) fully meet NPDES standards and Chapters 17-25 and 17-302.500, F.A.C., by 1998. Upgrade private property on-site drainage standards to ensure retention of at least the first one inch of stormwater, and no more runoff after development than before.	Implemented: <i>ongoing</i> .	
Policy 2.2.1	Enforce flood damage prevention regulations to ensure that new development occurs at appropriate elevations to minimize flood impact.	Implemented: <i>ongoing</i> .	
Policy 2.2.2	By statutory deadline or sooner, enact and enforce provisions regarding on-site drainage detention, runoff, erosion, minimum pervious open space, swale maintenance, and drainage level-of-service (LOS) standards.	Implemented: <i>ongoing</i> .	Ordinances: 30-230(f); 10-61 (10); 30-80(f) (6).h.2
Policy 2.2.3	Enact concurrency management system for development permits that meets 9J-5.0055 for infrastructure, recreation, and traffic.	Implemented.	
Objective 2.3	<b>Natural Resources:</b> Upgrade drainage system so outfalls into Biscayne Bay (and adjacent canals) fully meet NPDES standards and Chapters 17-25 and 17-302.500, F.A.C. by 1998. Upgrade private property on-site drainage standards to ensure retention of at least the first one inch of stormwater, and no more runoff after development than before.	Implemented: <i>ongoing</i> .	
Policy 2.3.1	Activate stormwater utility assessment based on Drainage Master Plan (DMP) by 1998 and update DMP as necessary in accordance with Objective 1.1 of the Infrastructure Element.	Implemented: <i>ongoing</i> .	
Policy 2.3.2	By statutory deadline or sooner, enact and enforce provisions regarding on-site drainage detention, runoff, erosion, minimum pervious open space, swale maintenance, and drainage level-of-service standards.	Implemented: <i>ongoing</i> .	Ordinances: 30-230(f); 10-61 (10); 30-80(f) (6).f; 30-80(f) (6).h.2; 16-64(c); 30-100; 30-181(g); 30-80(g) (6)
Objective 2.4	<b>Hurricane Evacuation:</b> Eliminate or reduce land uses inconsistent with interagency hazard mitigation report recommendations, and provide all relevant information to the Metro-Dade County (MAC) Office of Emergency Management (OEM).	Implemented: <i>ongoing</i> .	
Policy 2.4.1	Regulate development according to the FLUM and consistent with Interagency Hazard Mitigation Team Report, FEMA 955-DR-FL, 1992.	Implemented: <i>ongoing</i> .	
Policy 2.4.2	Annually assess population densities and transmit significant changes to MDC OEM.	Implemented: <i>ongoing</i> . NSFR reported monthly to Census Bureau.	
Objective 2.5	<b>Drainage and Sewer System Land Needs:</b> Ensure suitable land is available for drainage and sanitary sewer facilities needed to support planned infrastructure improvements.	Implemented: <i>ongoing</i> .	
Policy 2.5.1	By statutory deadline or sooner, enact and enforce land development code provisions for sewer and stormwater facilities.	Implemented: <i>ongoing</i> .	Ordinances: Chapter 29; 30-80(g) (4); 30-163;
Policy 2.5.2	Do not vacate road rights-of-way (ROW) without first determining that the ROW is not necessary to accommodate future storm and/or sanitary sewer facilities.	Implemented.	
Objective 2.6	<b>Historic Preservation:</b> Prepare a list of and strategy for preservation of potentially significant historic structures by 1999.	<b>Not implemented.</b> There is no local designation process, nor a list of historic properties because there are no structures on the Island older than 50 years and of significant historic merit. The structure associated with Nixon was eligible, but it was demolished in the summer of 2004. A cottage on the Matheson property was restored in a manner consistent with how it was originally built to represent typical local tourist lodgings of the time. A plaque was erected to acknowledge its historical significance. However, at this point in time, the cottage is not eligible for official local, state, or national designation because of its age.	
Policy 2.6.1	Designate candidates for historic preservation and draft a strategy for preservation of some or all of these structures.	Not implemented.	
Objective 2.7	<b>Biscayne Bay Preservation:</b> Assist MDC's efforts to preserve and enhance Biscayne Bay Aquatic Preserve.	In progress. Septic tanks are in the process of being replaced with sanitary sewers and new water pipes. The Village is in the grant-raising phase of the project.	
Policy 2.7.1	Attempt to maintain and improve water quality of Biscayne Bay by implementing DMP, replacing septic tanks with sanitary sewers, land development code provisions for on-site stormwater detention and marina pump-out facilities, and coordination with Biscayne Bay Shoreline Development Review Committee.	In progress. Septic tanks are in the process of being replaced with sanitary sewers and new water pipes. The Village is in the grant-raising phase of the project.	Ordinances: 30-100(f) (3).a.4; 30-100(f) (3).a.5



## VILLAGE OF KEY BISCAIYNE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

### ***b. Traffic Circulation***

#### **(1) Purpose of the Traffic Circulation Plan.**

The purpose of the Traffic Circulation chapter is to:

*“...provide a transportation system that meets the circulation needs of Key Biscayne in a safe and efficient manner but does not adversely impact the quality of life of the residents.”*

#### **(2) Summary Assessment.**

The Traffic Circulation section addresses elements of Key Biscayne’s vehicular, pedestrian and transit issues on both the local and regional levels. In several cases, the policies are initial steps toward problem solving; e.g. the completion of an exploratory plan, the inclusion of provisions in the LDC or the completion of a project’s first phase. To date, the Village has implemented or is in progress with the majority of the policies. The Crandon Boulevard Master Plan was completed in February of 2004 and construction is underway; the most recent Ocean Lane Drive public workshop was conducted on October 17<sup>th</sup> 2005 and addressed the issues of parking, beach, access and public safety; and a bike, pedestrian and streetscape plan is in progress for Harbor Drive, Fernwood Road, and West Mashta Drive.

However, the Traffic Circulation Element will need to be updated to address a developing issue identified during the 2020 visioning process: an increase in internally generated traffic congestion. According to anecdotal evidence, the number of cars per household on Key Biscayne is trending upward. (According the state Department of Motor Vehicles, the number of registered vehicles in January 2006 is 10,582. The Department is currently unable to provide historical data for the purposes of comparison.<sup>9</sup> However, the figure provided may serve as the basis for a future study analyzing the patterns in internally-generated traffic congestion.)

#### **(3) Recommended Amendments to the Traffic Circulation Element.**

The following ordinances affecting the Traffic Circulation Element have been passed since the Comprehensive Plan was adopted.

---

<sup>9</sup> According to the DMV, due to the prior configuration of its database, historic registered vehicle counts derived from addresses or zip codes may be inaccurate. It was possible for a vehicle to mistakenly be counted more than once: the address field was associated with the customer, not to the vehicle record; therefore, if a customer changed his or her address more than once in a calendar year, the vehicle record would have been double-counted.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

Ord. 2004-05 approved the creation of the Crandon Boulevard Master Plan Implementation Committee (created to oversee and ensure the completion of the CBMP throughout its three phases).

The following amendments to the Traffic Circulation Element are being suggested as part of the Evaluation and Appraisal Report. (See Section 6 Conclusions and Recommendations)

- Under Objective 1.1, add a policy scheduling a traffic study to assess the impact of internally generated traffic congestion. (See Section 6 Conclusions and Recommendations, Recommendation TC1)
- Under Objective 1.1, add a policy scheduling a traffic study to assess the LOS of collector and local streets. (See Section 6 Conclusions and Recommendations, Recommendation TC2)
- In Policy 1.1.1, change the designation for arterial roadways from LOS "E" to LOS "D." (See Section 6 Conclusions and Recommendations, Recommendation TC3)
- Designate Fernwood Road as a transitional road between residential and commercial. At the rear lot line of specific commercial centers on Crandon Boulevard, require that access points be opened where appropriate to pedestrians, golf carts and, on a limited basis, to vehicular traffic. (See Section 6 Conclusions and Recommendations, Recommendation TC4)
- Place and coordinate the update of electric signs at the intersection of Highway 95 and US Route 1 South that inform visitors if Bill Baggs Park is at capacity or accepting additional visitors. (See Section 6 Conclusions and Recommendations, Recommendation TC5)
- To better encompass the spectrum of transportation facilities, the Traffic Circulation Element shall be renamed the Transportation Element. (See Section 6 Conclusions and Recommendations, Recommendation TC6)
- To the new Transportation Element, the Village should add a policy to "[u]pdate the transportation maps every three years." (See Section 6 Conclusions and Recommendations, Recommendation TC7)



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

- To the new Transportation Element, the Village should add a policy to “[c]oordinate the Future Land Use Map with the transportation system. (See Section 6 Conclusions and Recommendations, Recommendation TC8)
  - To the new Transportation Element, the Village should add a policy to “[e]stablish numerical indicators to measure achievement of mobility goals.” (See Section 6 Conclusions and Recommendations, Recommendation TC9)
  - To the new Transportation Element, the Village should add a policy to “[c]onduct a public transit feasibility study.” (See Section 6 Conclusions and Recommendations, Recommendation TC10)
- (4) Evaluation of Goals, Objectives, and Policies of the Traffic Circulation Plan.
- See matrix on following page.

(5) Traffic Circulation Plan Land Development Code Ordinances.

**Section 30-181:** Location, Character and Size of Required Parking Spaces

**Section 30-100(f)(4):** *Driveway and Parking criteria.* Regulates 1) points of access 2) driveway materials 3) setbacks and 4) width

**Section 30-100(f)(4).c:** *Setbacks.* All driveways shall be set back at least five feet from any side property line. All circular driveways shall be set back at least two feet from any front and/or property side street property line. On corner lots, driveways shall be set back 15 feet from the extended right-of-way Intersection.

**Section 30-100(f)(4).d:** *Width.* A maximum width of 24 feet is permitted for single family and 36 feet for two-family homes for a lot with 75 feet or less of frontage at the property line. For all other lots the width of a driveway or combination of driveways at the point of intersection with the right-of-way shall not exceed the lesser of 36 feet or 32 percent of the lot's frontage, including side street frontage on corner lots.

**Section 30-181(n)** Location, Character, and Size of Required Parking Spaces: Curb cuts. All curb cuts shall conform to the design and construction standards required by the Public Works Supervisor.



# VILLAGE OF KEY BISCAIYNE

## EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

	TRAFFIC CIRCULATION		
Goal 1	To provide a transportation system that meets the circulation needs of Key Biscayne in a safe and efficient manner but does not adversely impact the quality of life of the residents.		
Objective 1.1	<b>Motorized Transportation System:</b> Maintain designated LOS, but with enhanced pedestrian safety and amenities.	<b>Partially implemented/ In progress.</b> The Village has maintained LOS except at main intersections; however, deficiencies will be corrected with the Crandon Boulevard Street Enhancements, which are currently under construction.	
Policy 1.1.1	Regulate timing of development to maintain at least peak hour level of service standards for arterials (LOS "E"), collectors (LOS "B"), and local service streets (LOS "A").	<b>Implemented: ongoing.</b> Density limited by ordinance to current level.	
Policy 1.1.2	By statutory deadline or sooner, enact and enforce LDC standards regarding roadway access and on-site traffic flow and parking.	<b>Implemented: ongoing.</b> Originally based on County standards, parking regulations on 5/9/00 to meet the needs of the VKB.	
Policy 1.1.3	Street improvements designed to deter speeding on collector streets.	<b>Implemented: ongoing.</b> The Village has implemented a series of traffic calming devices on collector streets and reduced the speed limit to 20 mph on all roads except Crandon Boulevard, which is operated by the County. Ocean Lane Drive is in the design phase of receiving new sidewalks, striping and paving.	
Objective 1.2	<b>Land Use Plan Implications:</b> Limit commercial development and redevelopment to arterial road frontage plus Harbor Drive collector street frontage from Fernwood Road to Crandon Boulevard.	<b>Implemented: ongoing.</b> The Village has added a Commercial district to the Land Development Code; all commercial development and redevelopment is contained within that zone. As denoted on the future land use map, the District is located along Crandon Boulevard.	
Policy 1.2.1	Use future land use and zoning maps to limit commercial and office development to arterial frontage and Harbor Drive collector street frontage from Fernwood Road to Crandon Boulevard except for ocean resorts.	<b>Partially implemented.</b> Only 2 properties do not front Crandon: 21 and 51 Crandon Drive; they front Harbor Drive.	
Objective 1.3	<b>Regional Plans:</b> Work with MDC to limit traffic volume increases on the Rickenbacker Causeway.	<b>Implemented: ongoing.</b>	
Policy 1.3.1	Work with MDC Planning Department and Metropolitan Planning Organization to limit intensity of development on Causeway and Crandon Boulevard in order to maintain an adequate traffic level of service.	<b>Implemented: ongoing.</b> Adopted Virginia Key and Calusa Park agreements.	
Objective 1.4	<b>Right-of-Way Protection:</b> Implement LDC, FLUM and Future Traffic Circulation Plan to protect existing and future ROWs from building encroachment, and achieve a 10% net reduction of Crandon Blvd. (plus one block of Harbor Drive) curb cuts by 2004.	<b>Implemented.</b> Curb cuts have been reduced in several locations as a result of the Crandon Boulevard Streetscape Project: the entry block, the intersection and Harbor Drive, near 560 Crandon Boulevard and near 220 Crandon Boulevard one or more curb cuts has been eliminated. The Project's Master Plan explicitly recommends the elimination or reduction of curb cuts.	
Policy 1.4.1	Use LDC to prohibit ROW encroachments through setback requirements.	<b>Implemented.</b>	Ordinances: 30-100(f), (4).c; 30-100(f), (4).d
Policy 1.4.2	Use LDC standards and LDC review process to reduce number and width of existing curb cuts on Crandon and Harbor by 10%.	<b>Implemented.</b> See above Objective 1.4.	Ordinances: 30-181(n)
Objective 1.5	<b>Bikeways and Pedestrian Ways:</b> Achieve the first phase of a pedestrian and bikeway system based on a streetscape and multi-modal circulation plan for Harbor Drive, Fernwood Road, West Wood Drive and West Mashta Drive by 2004.	<b>Implemented.</b> All projects were completed by June 2005.	
Policy 1.5.1	Complete bike, pedestrian and streetscape plan for Harbor Drive, Fernwood Road and West Mashta Drive by 1999. Include these streets and West Wood Drive in a speed control planning and implementation plan.	<b>Implemented.</b> Complete by 2005.	
Policy 1.5.2	Achieve first phase implementation of this plan on Harbor Drive by 2004.	<b>Implemented.</b>	





## VILLAGE OF KEY BISCAIYNE EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

### ***c. Housing***

#### **(1) Purpose of the Housing Plan.**

The purpose of the Housing Plan is to:

*“...Assure the availability of a sound and diversified housing stock in Key Biscayne.”*

#### **(2) Summary Assessment.**

Objectives and Policies in the Housing Section address either the appearance and quality of the housing stock or the diversification of what is available. Since the time the Plan was written, the Key Biscayne real estate market has experienced a steady increase in demand while maintaining a finite supply of vacant and redevelopable land. Therefore, while the market has naturally addressed most issues regarding appearance and quality, the diversification and affordability of residential property has lessened. Policies addressing these latter issues have either not been implemented or, when implemented, have not successfully produced the intended results. The Village intends to continue working with other jurisdictions on the issue as well as define and promote affordable housing of a type and a price range consistent with Key Biscayne local market and general market conditions.

#### **(3) Recommended Amendments to the Housing Element**

No ordinances affecting the Housing Element have been passed since the Comprehensive Plan was adopted.

The EAR recommends that the Master Plan be amended to reflect the following:

- Add a policy that the Village shall “[m]onitor current and future housing needs and explore innovative solutions to increase the affordability and diversity of the stock while maintaining compliance with Coastal High Hazard Area and Floodplain regulations.” (See Section 6 Conclusions and Recommendations, Recommendation H1)
- The following objective should be amended to read:
  - Objective 1.4. The Local Planning Agency (LPA) shall define and seek opportunities to promote affordable housing of a type and at a price range consistent with Key Biscayne local market and general market conditions.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

(See Section 6 Conclusions and Recommendations, Recommendation H2)

- The following objective should be amended to read:
  - Objective 1.6 Development of Affordable Housing in Nearby Communities. Develop ongoing interlocal coordination with other jurisdictions and non-governmental agencies for the provision of affordable housing.

(See Section 6 Conclusions and Recommendations, Recommendation H3)

- Remove Objective 1.1 because it is no longer relevant to existing conditions and needs. There were and are no vacant properties along Crandon Boulevard. There were two sites originally developed as small, low-density hotels and replaced with more than 250 units.
  - Objective 1.1 New Construction: Cooperate with private sector to build at least 250 well designed and diversified units on vacant residentially designated areas along Crandon Boulevard by 2004.

(See Section 6 Conclusions and Recommendations, Recommendation H4)

- Add a policy that the Village shall “[e]xplore federal, state, and local housing subsidy programs as means to provide housing opportunities for low-income persons and families, where appropriate. (See Section 6 Conclusions and Recommendations, Recommendation H5)
- Add a policy that the Village shall “[c]ollaborate with Miami-Dade County and the City of Miami to create a program for annual evaluation of affordable housing needs within incorporated and unincorporated areas. (See Section 6 Conclusions and Recommendations, Recommendation H6)
- Add a policy that the Village shall “[p]articipate in South Florida Regional Planning Council’s initiatives directed toward educating local governments of new techniques, especially programs applicable to the region and/or the county, for promoting affordable housing. (See Section 6 Conclusions and Recommendations, Recommendation H7)



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

- Add a policy that the Village shall “[e]valuate the feasibility of establishing an affordable housing fee trust fund in partnership with Miami-Dade County or the City of Miami (via interlocal agreements) to fund affordable housing programs and projects in Miami-Dade or the City of Miami. (See Section 6 Conclusions and Recommendations, Recommendation H8)
- Add a policy that the Village shall [e]nsure that land use designations and zoning districts that foster diverse housing types to serve the needs of the local population, including single family, duplex, and multi-family units. (See Section 6 Conclusions and Recommendations, Recommendation H9)

#### (4) Evaluation of Goals, Objectives and Policies of the Housing Plan.

See matrix on following page.

#### (5) Housing Plan Land Development Code Ordinances

**Section 30-100 (e):** *Setback Regulations (minimum)*



# VILLAGE OF KEY BISCAIYNE

## EVALUATION AND APPRAISAL REPORT (EAR) OF THE

### KEY BISCAIYNE MASTER PLAN

	HOUSING		
Goal 1	To assure the availability of a sound and diversified housing stock in Key Biscayne.		
Objective 1.1	<b>New Construction:</b> Cooperate with private sector to build at least 250 well designed and diversified units on vacant residentially designated areas along Crandon Boulevard by 2004.	<b>Obsolete.</b> There were and are no vacant properties along Crandon Boulevard. There were two sites originally developed as small, low-density hotels and replaced with more than 250 units.	
Policy 1.1.1	Group Homes: Accommodate as many small group homes and foster care facilities as possible in residential areas.	<b>Implemented.</b> Existing mixed density east of Crandon Boulevard. Grand Bay SF-R and Ocean Club MF-R zoning districts added to LDC.	
Policy 1.1.2	Periodically review permitting and regulatory processes in the LDC to ensure prompt and professional development permitting process.	<b>Implemented.</b> The Village originally used Filemaker Pro manual permit system and had no permit time schedule. However, it converted to Permits Plus to upgrade processing and established a timeline for permit processing.	
Objective 1.2	<b>Group Homes:</b> Accommodate as many small group homes and foster care facilities as possible in residential areas.	<b>Implemented: ongoing.</b> The Village has amended zoning code to permit group homes in the Multi-Family District, but the private sector has yet to exercise this opportunity.	
Policy 1.2.1	By statutory deadline or sooner, permit group homes and foster care facilities with consideration to hurricane evacuation constraints.	<b>Not implemented.</b>	
Objective 1.3	<b>Conservation Rehabilitation, Demolition, Substandard Housing Structural and Aesthetic Improvement of Housing:</b> Maintain a structurally sound housing stock by rehabilitating or demolishing housing units that may deteriorate to a substandard condition in the future. Measure achievement by existence of no substandard housing units.	<b>Implemented: ongoing.</b>	
Policy 1.3.1	The Village Manager shall enforce County minimum housing standards code or appropriate modified code enacted by Council.	<b>Implemented: ongoing.</b> The County's codes are used.	
Policy 1.3.2	Use LDC setback/bulk standards and DMP to assure stable residential neighborhoods.	<b>Implemented.</b> Originally based on County code, ordinances decreasing FAR and increasing sideyards for SF-R were adopted on 10/24/00.	Ordinances: 30-100(e)
Objective 1.4	<b>Housing Coordination and Implementation:</b> The Local Planning Agency (LPA) shall coordinate and achieve housing policy implementation.	<b>Not implemented.</b>	
Policy 1.4.1	Communicate with private and non-profit housing agencies to assure that Village policy information flows to housing providers.	<b>Not implemented.</b> The Village has not communicated with any non-profit housing agencies.	
Policy 1.4.2	Cooperate with any developer using County or other subsidy mechanisms.	<b>Implemented: ongoing.</b> No developer has called to date, but if one did the Village would be willing to cooperate.	
Objective 1.5	<b>Historically Significant Housing:</b> Identify and preserve at least one historically significant residential structure.	<b>Not implemented.</b> There is no local designation process, nor a list of historic properties because there are no structures on the Island older than 50 years and of significant historical merit. The structure associated with Nixon was eligible, but it was demolished in the summer of 2004. A cottage on the Matheson property was restored in a manner consistent with how it was originally built to represent typical local tourist lodgings of the time. A plaque was erected to acknowledge its historical significance. However, at this point in time, the cottage is not eligible for official local, state, or national designation because of its age.	
Policy 1.5.1	Designate candidates for historic preservation based on age, architecture and function, and draft a preservation strategy.	<b>Not implemented.</b> See above Objective 1.5.	
Objective 1.6	<b>Development of Affordable Housing in Nearby Communities:</b> Provide adequate sites for the distribution of very low income, low income and moderate income families.	<b>In progress.</b> The Village has not assisted other communities, nor has its help been requested.	
Policy 1.6.1	Village manager or designee will inform Village Council of appropriate actions that encourage the provision of adequate sites for affordable housing in nearby communities with land values that can reasonably accommodate such housing.	<b>In progress.</b>	
Objective 1.7	<b>Structural and Aesthetic Improvement of Existing Housing:</b> Achieve and maintain 100% standard housing and achieve private reinvestment to structurally and aesthetically upgrade at least 50 existing housing units.	<b>Implemented: ongoing.</b> The number of renovated Mackel homes greatly exceeds 50.	
Policy 1.7.1	Vigorously enforce the existing code to ensure no housing becomes substandard.	<b>Implemented: ongoing.</b>	
Policy 1.7.2	By statutory deadline or sooner, enact or enforce LDC regulations for building height, setback and other regulations that facilitate aesthetically pleasing upgrades to existing housing stock.	<b>Implemented.</b> Originally based on County code, VKB ordinances are enforced at several points of review, required at formwork, stemwall and construction completion.	Ordinances: 30-100(e)



## EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAIYNE MASTER PLAN

### **d. Infrastructure**

#### **(1) Purpose of the Infrastructure Plan.**

The purpose of the Infrastructure Element is to:

*“...Provide and maintain the public infrastructure in a manner that will ensure bay water quality, and public healthy, safety, and quality of life for Key Biscayne residents.”*

#### **(2) Summary Assessment.**

The Infrastructure Element of the Master Plan provides policies to address deficiencies in 1995 levels of service as well as anticipated future needs related to drainage; sewage; solid waste; water and sewer; and water conservation. The Village has, at minimum, begun implementation in all areas. However, unforeseen conflicts (e.g. hurricanes) have delayed completion dates for several objectives and policies beyond the scope of the timeline specified in the Master Plan. The Plan will need to be updated to accurately reflect current completion projections.

#### **(3) Recommended Amendments to the Infrastructure Element.**

No ordinances affecting the Infrastructure Element have been passed since the Comprehensive Plan was adopted.

The following amendments to the Infrastructure Element are being suggested as part of the Evaluation and Appraisal Report. (See Section 6 Conclusions and Recommendations)

- The language and dates referenced in the following policies should be updated:
  - Objective 1.1: *Continue* to upgrade drainage system so outfalls in Biscayne Bay (and adjacent canals) fully meet NPDES standards and Chapters 17-25 and 17-302.500, F.A.C. *Continue* to upgrade private property on-site drainage standards to ensure retention of at least the first one inch of stormwater, and no more runoff after development than before.
  - Policy 1.2.1 Complete financial and engineering feasibility plan to extend sanitary sewers to unsewered areas by **2008**, and complete implementation by **2010**.
  - Objective 1.3: Future Needs; Solid Waste: Continue to achieve the most cost-effective solid waste collection system.



## VILLAGE OF KEY BISCAINE

# EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN

- Objective 1.5: Water Conservation: Continue working toward reducing the average daily per capita water consumption by 5%.

(See Section 6 Conclusions and Recommendations, Recommendation I1)

- Add a policy that the Village shall “[u]pdate the Master Plan within 18 months of the South Florida Water Management District updating its regional water supply plan, highlighting alternative water supply projects, and completing the required “Work Plan Amendment.” (See Section 6 Conclusions and Recommendations, Recommendation I2)
- Add a policy that the Village shall “[s]eek and obtain a written statement from the Miami-Dade Water and Sewer Authority regarding the availability of water to serve all proposed development projects, including current and projected demand, remaining permitted water withdrawals, facility capacity, and scheduled capital improvement projects.” (See Section 6 Conclusions and Recommendations, Recommendation I3)
- Add a policy that the Village shall “[e]stablish a single-point-of-contact at the South Florida Water Management District and Miami-Dade Water and Sewer Authority to determine the extent to which the Village will be involved in the planning, financing, construction, and operation of water supply facilities that will serve the community.” (See Section 6 Conclusions and Recommendations, Recommendation I4)
- Add a policy that the Village shall “[v]erify with the Miami-Dade Water and Sewer Authority the availability of water before making changes to the Future Land Use Map.” (See Section 6 Conclusions and Recommendations, Recommendation I5)

#### (4) Evaluation of Goals, Objectives, and Policies of the Infrastructure Plan.

See matrix on following page.

#### (5) Infrastructure Plan Land Development Code Ordinances.

##### **Section 8-100:8-108:** *Water Shortage Regulations*

**Section 30-230(a):** Promote xeriscape by encouraging the use of drought-tolerant landscape materials, grouping of plant material by



VILLAGE OF KEY BISCAINE

## **EVALUATION AND APPRAISAL REPORT (EAR) OF THE KEY BISCAINE MASTER PLAN**

water requirement and the use of irrigation systems that conserve the use of potable water supplies.

**Section 30-232:** *Required Landscape Plans*

**Section 30-234:** *Required Irrigation Plans*





# VILLAGE OF KEY BISCAIYNE

## EVALUATION AND APPRAISAL REPORT (EAR) OF THE

### KEY BISCAIYNE MASTER PLAN

INFRASTRUCTURE			
<b>Goal 1</b>	To provide and maintain the public infrastructure in a manner that will insure bay water quality, and public health, safety, and quality of life for Key Biscayne residents.		
<b>Objective 1.1.</b>	<b>Current Deficiencies and Future Needs; Drainage:</b> Upgrade drainage system so outfalls into Biscayne Bay (and adjacent canals) fully meet NPDES standards and Chapters 17-25 and 17-302.500, F.A.C., by 1998. Upgrade private property on-site drainage standards to ensure retention of at least the first one inch of stormwater, and no more runoff after development than before.	Implemented: <i>ongoing.</i>	
Policy 1.1.1	Activate the storm water utility assessment as a basis for bonding for the first phase of drainage plan implementation by 1998. Update DMP as needed to ensure efficacy and upgrade of storm sewer system as outlined in Objective 1.1 above.	Implemented: <i>ongoing.</i>	
Policy 1.1.2	Mitigate direct stormwater outfalls as technically and economically feasible into Biscayne Bay and canals to meet standards set forth in Objective 1.1 above.	Implemented: <i>ongoing.</i>	
Policy 1.1.3	By statutory deadline or sooner, enact and enforce provisions regarding on-site drainage detention, runoff, erosion, minimum pervious open space, swale maintenance, and drainage level-of-service standards in order to meet requirements as outlined by Objective 1.1 above.	Implemented: <i>ongoing.</i> Originally based on County code, ordinances were amended to meet needs of the VKB; specifically, a 30 percent open space requirement was implemented for SF-R on 10/24/00 and general retention of runoff requirements were implemented on 5/9/00.	Ordinances: 30-230(f); 10-61 (10); 30-80(f); (6).f; 30-80(f); (6).h.2; 16-64(c); 30-100; 30-181(g); 30-80(g). (6)
<b>Objective 1.2</b>	<b>Current Deficiencies and Future Needs; Sewage:</b> Extend public sewer service to additional developed areas by 2008 and ensure effective septic and drain field functioning.	In progress. Redesign of sanitary sewer project to include replacement of existing asbestos water lines.	
Policy 1.2.1	Complete financial and engineering feasibility plan to extend sanitary sewers to unsewered areas by 1998, and complete implementation by 2008.	In progress.	
Policy 1.2.2	Cooperate with State of Florida Health and Rehabilitative Services (FHRS) and MDC Department of Environmental Resources Management (DERM) to ensure effective functioning of septic tanks and drain fields.	Implemented.	
<b>Objective 1.3</b>	<b>Future Needs; Solid Waste:</b> Achieve the most cost-effective solid waste collection system by 1999.	Implemented: <i>ongoing.</i>	
Policy 1.3.1	Assess cost-effectiveness of replacing County collection system with one or more private systems by 1996.	Implemented.	
Policy 1.3.2	Initiate recommended changes in the solid waste collection and recycling system by 1999.	Implemented.	
<b>Objective 1.4</b>	<b>Level of Service:</b> Provide adequate capacities to meet the LOS standards; see policies for measurable standards.	Implemented.	
Policy 1.4.1	<b>Sewered Areas:</b> County-wide "maximum day flow" of preceding year shall not exceed 98% of County treatment system's rated capacity. The sewage generation standard shall be 140 average gallons per capita per day.	Implemented: <i>ongoing.</i>	
Policy 1.4.2	<b>Unsewered Areas:</b> The LOS shall be receipt of a DERM septic tank permit.	Implemented: <i>ongoing.</i>	
Policy 1.4.3	<b>Potable Water:</b> County-wide "maximum day flow" of preceding year shall not exceed 98% of County treatment system's rated capacity. Minimum pressure of 20 lbs./sq. in. at property line and consumption standard of 280 avg. gallons/capita/day.	Implemented: <i>ongoing.</i>	
Policy 1.4.4	<b>Drainage:</b> Nonresidential development and redevelopment accommodate runoff to meet Federal, state and local requirements. Stormwater is treated in according to Chapter 17-25 and Chapter 17-302.500, F.A.C., with one inch of runoff retained on site.	Implemented: <i>ongoing.</i>	
Policy 1.4.5	<b>Solid Waste:</b> County solid waste disposal system maintains a minimum of five years capacity using a generation rate of 5.2 pounds per person per day.	In progress: <i>ongoing.</i>	
<b>Objective 1.5</b>	<b>Water Conservation:</b> Reduce the average daily per capita water consumption by 5% by 2004 (dependent on near-term ability to measure Village-wide consumption).	In progress.	
Policy 1.5.1	By statutory deadline or sooner, enact and enforce LDC regulations including water conservation-based irrigation; water conservation-based plant species, lawn watering restrictions, mandatory use of ultra-low volume water saving devices for substantial rehabilitation and new construction, and other water conservation measures as feasible.	Implemented: <i>ongoing.</i>	Ordinances: 8-100; 8-108 30-230(a); 30-232; 30-234;
Policy 1.5.2	Promote education programs that discourage waste and conserve potable water.	Implemented: <i>ongoing.</i>	
Policy 1.5.3	Cooperate with MDC Water and Sewer Authority (WASA) to devise a water tracking consumption separate from customer billings or other sources.	Implemented: <i>ongoing.</i>	
Policy 1.5.4	Cooperate with WASA efforts to ensure the potable water distribution system shall reduce water loss to less than 16% of the water entering the system.	Implemented: <i>ongoing.</i>	